



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

Office of the General Counsel

April 4, 2018

VIA EMAIL AND U.S. MAIL

Keith Lewinger, Director
San Diego County Water Authority
4677 Overland Avenue
San Diego, California 92123

Re: Your letter dated March 21, 2018, regarding Budget and Rate Questions

Dear Director Lewinger:

This letter responds to your questions, received via email on Wednesday, March 21, 2018, at 12:25 p.m. (attached), requesting that they be addressed “in writing, in a time frame that gives us [the San Diego County Water Authority] a chance to review [Metropolitan’s] responses and supporting documentation before the next workshop.”

Workshop #4 was scheduled for Tuesday, March 27, 2018, primarily at your request, to respond to questions you indicated you would provide shortly after Workshop #3 held on March 12, 2018. Your request arrived nine calendar days later. This did not provide sufficient time for staff to respond to your request prior to the workshop. However, we provide responses to your questions now in advance of the next meetings to consider the proposed budget, rates, charges, and ad valorem tax limitation suspension.

Outset (unnumbered comment)

You state that “staff has presented budget and proposed rates, with general descriptions of methodology and voluminous data,” and that you need Metropolitan’s Financial Planning Model to follow Metropolitan’s cost allocation methodology. On Friday, March 23, 2018, before Workshop #4, we responded to SDCWA’s General Counsel’s similar statement regarding the level of detail in the documents proposing Metropolitan’s budgets, rates, and charges. Please see the attached March 23, 2018 letter. Additionally, we reiterate here that Metropolitan has provided significant data to support the proposed biennial budget for Fiscal Years (“FY”)s 2018/19 and 2019/20 (the “Proposed Biennial Budget”), including the ten-year financial forecast and resulting revenue requirements for FY 2018/19 and FY 2019/20, the FYs 2018/19 and

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2019/20 Cost of Service Report for Proposed Water Rates and Charges (the “2018 Cost of Service Report”), and resulting proposed Calendar Year (“CY”) water rates and charges effective January 1, 2019 and January 1, 2020 (“CY Rates and Charges”) to support the Proposed Biennial Budget and revenue requirements.

On its “Underlying Materials” page supporting the Proposed Biennial Budget and CY Rates and Charges, located at <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>, Metropolitan has also provided a significant amount of information—over 2,550 pages—on the line item detail by labor and Operations and Maintenance expense items that makes up its Departmental budget. Metropolitan has provided a 185-page Capital Investment Plan (“CIP”), which includes three years of planned spending and a description of nearly 400 projects. In addition, Metropolitan has provided 75 files, consisting of a multitude of worksheets and pages that provide the detail SDCWA is requesting. In particular, Metropolitan has provided in its 2018 Cost of Service Report 150 pages of COS Tables that provide the functionalization, allocation and distribution of costs in its Proposed Biennial Budget, further showing Metropolitan’s cost allocation methodology.

The line-item budget information forms the bases of the departmental and non-departmental budgets in the Proposed Biennial Budget. Those costs are then assigned to cost functions, as explained in the 2018 Cost of Service Report. Those functionalized costs are recovered through appropriate rate elements, as further explained in the Cost of Service Report. Additionally, the COS Tables explain that process for line-item budgets. For example, the Departmental O&M for the Office of the General Manager of \$4,782,324 is shown in the first COS Table. (Page 110 of 259, Attachment 3, Board Letter 9-2.) You see in the data excerpt below that \$4,344,448 is for Labor and Labor Additive and \$345,000 is for Outside Services.

Revenue Requirements		1	2	3	4	5	6	
Fiscal Year Ending 2019		Labor And Labor Additive	Outside Services	Utilities	Chemicals	Other O&M	O&M Capitalization (pro-rated)	Projected Total To Be functionalized
Departmental O&M								
Group	Item							
	Office of General Manager	4,344,448	345,000	-	-	312,220	(219,344)	4,782,324
	Office of General Manager	1,079,067	55,000	-	-	514,900	(72,314)	1,576,653
	Office of General Manager	4,869,969	4,943,638	-	-	1,618,882	(501,363)	10,931,125
	External Affairs	3,515,616	1,733,300	6,500	-	863,173	(268,326)	5,850,263
	External Affairs	4,197,435	1,373,266	-	-	1,000,380	(288,170)	6,282,911
	External Affairs	5,923,489	715,200	-	-	2,256,014	(390,071)	8,504,632
	External Affairs	3,119,587	1,524,000	-	-	1,376,627	(264,012)	5,756,202
	Human Resources	9,445,147	1,335,620	-	-	1,561,651	(541,268)	11,801,151

You will see in the next data excerpts from the next COS Tables that the same line-item budget is further broken down by categories of service function, including a breakdown by sub-categories of costs within those functions. (Pages 111 and 112 of 259, Attachment 3, Board Letter 9-2.) For example, the General Manager’s O&M Budget assigned to the treatment function is broken down by treatment plant.

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Page 111:

Functional Assignment Percentages		Fiscal Year Ending 2019																			
		Fn1	Fn2	Fn3	Fn4	Fn5	Fn6	Fn7	Fn8	Fn9	Fn10	Fn11	Fn12	Fn16	Fn17	Fn18	Fn19	Fn20	Fn21		
		Source of Supply			Conveyance & Aqueduct					Storage				Treatment					Distribution		
		CRA	SWP	Other	CRA Power	CRA All Other	SWP Power	SWP All Other	Other Conv. & Aqueduct	Emergency	Drought	Regulatory	Power	Jensen	Weymouth	Diemer	Mills	Skinner	Distribution		
Letter Codes for Primary Functional Assignment Basis																					
a Direct Assignment																					
b Work in Process/Net Book Value																					
c Pro-Rating																					
d Branch Manager Analysis																					
e Prior-Year Results																					
f Other																					
Departmental O&M																					
Functional Allocation Basis (4)																					
Group	Item																				
Office of General Manager	Office of General Manager	2.1%	2.4%	2.6%	1.0%	8.8%	0.0%	4.0%	1.8%	1.6%	1.4%	0.6%	0.0%	5.0%	5.5%	5.9%	3.8%	5.0%	20.4%		
Office of General Manager	Board of Directors																				
Office of General Manager	Bay Delta Initiatives																				
External Affairs	Legislative Services																				
External Affairs	Media Communications Services																				
External Affairs	Manager, External Affairs/Special Projects																				
External Affairs	Conservation & Community Services																				
Human Resources		2.1%	2.4%	2.6%	1.0%	8.8%	0.0%	4.0%	1.8%	1.6%	1.4%	0.6%	0.0%	5.0%	5.5%	5.9%	3.8%	5.0%	20.4%		

Page 112:

Functional Assignment Results		Fiscal Year Ending 2019																			
		Fn1	Fn2	Fn3	Fn4	Fn5	Fn6	Fn7	Fn8	Fn9	Fn10	Fn11	Fn12	Fn16	Fn17	Fn18	Fn19	Fn20	Fn21		
		Source of Supply			Conveyance & Aqueduct					Storage				Treatment					Distribution		
		CRA	SWP	Other Supply	CRA Power	CRA All Other	SWP Power	SWP All Other	Other Conv. & Aqueduct	Emergency	Drought	Regulatory	Power	Jensen	Weymouth	Diemer	Mills	Skinner	Distribution		
Departmental O&M																					
Group	Item																				
Office of General Manager	Office of General Manager	99,707	113,642	122,785	47,926	422,012	-	193,339	84,503	77,085	65,998	27,836	-	239,538	264,350	280,920	183,499	236,600	976,380		
Office of General Manager	Board of Directors	-	-	-	-	-	-	10,931,125	-	-	-	-	-	-	-	-	-	-	-		
Office of General Manager	Bay Delta Initiatives	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
External Affairs	Legislative Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
External Affairs	Media Communications Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
External Affairs	Manager, External Affairs/Special Projects	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
External Affairs	Conservation & Community Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

These tables show that 5.5% of the General Manager’s O&M budget is assigned to the Weymouth Treatment plant, or \$264,350.

Following these tables there is further breakdown showing how the functionalized costs are allocated into categories according to their causes and behavioral characteristics. This allocation ensures that costs are recovered in a manner consistent with the causes and behaviors of those costs by using the Commodity/Demand approach. For example, costs are allocated into demand, commodity, or standby categories, depending on their causes and behavioral characteristics. Continuing with the same General Manager’s O&M example, you will see in the data excerpt from the corresponding COS Table that the \$264,350 of that budget assigned to the Weymouth Plant is allocated as 100% fixed commodity based on its causes and behaviors. (Page 154, Attachment 3, Board Letter 9-2.)

Allocation Percentages: Treatment - Weymouth		Fiscal Year Ending 2019						
		Allocation Percentages					% Total	
		Fixed			Variable Commodity	Other	Hydroelectric	
		Demand	Commodity	Standby				
Departmental O&M								
Group	Item							
Office of General Manager	Office of General Manager	264,350	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Board of Directors	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Office of General Manager	Bay Delta Initiatives	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Legislative Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Media Communications Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Manager, External Affairs/Special Projects	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
External Affairs	Conservation & Community Services	-	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%
Human Resources		652,325	0.0%	100.0%	0.0%	0.0%	0.0%	100.0%

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The resulting functionalized and allocated cost is recovered pursuant to the corresponding rate element, as those rate elements are described and explained in the 2018 Cost of Service Report. In the example above, the General Manager's O&M costs assigned to the Weymouth Plant are \$264,350 and are recovered through the Treatment Surcharge.

Thus, as explained and shown herein, Metropolitan has provided detailed and voluminous supporting data as well as written and graphic information walking through the steps of the allocation of costs and the recovery of costs through Metropolitan's rate structure.

California WaterFix Cost Allocation (unnumbered comment)

You suggest in your letter that there is an inconsistency as to the functionalization of the WaterFix costs at pages 83, 133, 81, and 85-86 of Board Letter 9-2. There is no inconsistency. Your letter points to schedules and sections of the 2018 Cost of Service Report that summarize different types of State Water Project ("SWP") Costs and therefore, are not the proper bases for a comparison.

California WaterFix expenditures in the Proposed Biennial Budget are limited to capital expenditures; there are no operating or maintenance expenses until the proposed project comes online. Therefore, the California WaterFix expenditures are treated consistent with State Water Project capital expenditures for conveyance and aqueduct referenced in pages 81, 83, and 133 of the 2018 Cost of Service Report, which you point out. But those SWP capital costs are not the same as the "SWP other" costs at pages 85 and 86, which reflect more than capital expenditures for SWP conveyance and aqueduct. Thus, as you point out, the percentages from one set of references do not match the percentages in the other; that is because they are not intended to match.

Page 79 of Attachment 3 to the February 13, 2018 Board Letter 9-2, which is the 2018 Cost of Service Report dated February 2018, explains the allocation of capital financing service function costs. These allocation percentages are shown for the SWP on Schedule 10 (page 81) for FY 2018/19 and Schedule 11 (page 82) for FY 2019/20:

"Schedules 10 and 11 provide the allocation percentages used to distribute the capital financing service function costs into Fixed Demand, Fixed Commodity and Fixed Standby service allocation categories for FY 2018/19 and FY 2019/20, respectively."¹

¹ February 13, 2018 Board Letter 9-2, Attachment 3, Page 79 of 259.

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The allocation of SWP capital costs is further explained of page 79:

“Costs for the Conveyance and Aqueduct (C&A) service function are allocated into Fixed Commodity, Fixed Demand and Fixed Standby categories. Because the capital costs for C&A were incurred to meet all three allocation categories, an analysis of C&A capacity usage was used. For FY 2018/19, 51 percent of the available conveyance capacity varies with the quantity of water produced, and is allocated to Fixed Commodity. A system peak factor of 1.4 was applied to the annual usage to determine that 21 percent of available capacity is used to meet peak monthly deliveries to the member agencies, and is allocated to Fixed Demand. The remaining portion of C&A, about 28 percent, is allocated to Fixed Standby. The same allocation percentages are applied to the CRA, SWP, and Other (Inland Feeder) Conveyance and Aqueduct sub-functions. The allocation shares reflect the system average use of conveyance capacity and not the usage of individual facilities.”

“For FY 2019/20, 54 percent of the available conveyance capacity varies with the quantity of water produced, and is allocated to Fixed Commodity. A system peak factor of 1.4 was applied to the annual usage to determine that 22 percent of available capacity is used to meet peak monthly deliveries to the member agencies, and is allocated to Fixed Demand. The remaining portion of C&A, about 24 percent, is allocated to Fixed Standby.”²

The impact of the SWP capital cost allocations on the revenue requirements is shown on Schedules 12 and 14 for FY 2018/19 and FY 2019/20, respectively, and summarized on Schedules 13 and 14 for FY 2018/19 and 2019/20, respectively.

In your letter, you compare these capital costs for the SWP conveyance and aqueduct to the broader costs for conveyance and aqueduct shown at pages 85-86. However, those schedules show *all* SWP conveyance and aqueduct costs, which extend beyond capital costs. Thus, the percentages are different, because they are not representing the same information and are therefore, not inconsistent.

To avoid any potential confusion, we have updated the 2018 Cost of Service Report at pages 78 and 79 to add “capital” when referencing the allocation of WaterFix costs, as follows: “SWP Conveyance and Aqueduct capital costs.”

² Ibid.

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Changes to Proposed Budget, Rates, and Charges (unnumbered comment)

You have stated that “it is not possible to consider changes” that could result from lowering proposed spending, borrowing, lowering rate increases, and other aspects of the budget, rates, and charges proposal. However, the detailed budget information we have provided, allows Board members and the public to scrutinize the level of spending by line-item. Moreover, borrowing for capital expenditures is explained in the Budget Summary and in the CIP portion of the document. As for consideration of lowering rate increases, that can be done by following the cost allocation process summarized in the 2018 Cost of Service Report and detailed in the COS Tables. Please also note that the Proposed Biennial Budget, page 180, explains the coverage ratios. You asked this question and staff provided a response regarding Metropolitan’s financial policies and the relationship between coverage ratios, reserve levels, and the necessary rate increases at Workshop #3.

Numbered questions

1. Please explain why the water supply costs in the 2016 and 2018 financial forecasts vary so significantly.

Water supply costs are lower due to a reduction in the Supply Programs budget, which do not necessarily vary by the amount of water delivered in each fiscal year. As explained in presentations, Supply Programs costs are lower, reflecting the current projection of the budget needed to maintain these programs. The Proposed Biennial Budget and ten-year financial forecast assume lower volumes from the Palo Verde Irrigation District land fallowing program, hence lower costs, and not funding the Yuma Desalter program. Additionally, Metropolitan renegotiated the terms of the Imperial Irrigation District Conservation program after adoption of the FYs 2016/17 and 2017/18 Biennial Budget.

At the end of CY 2015, Metropolitan was in the midst of a historic drought and had significantly drawn down water reserves from 2.7 million acre-feet (“MAF”) at the end of 2012 to 0.9 MAF (excluding emergency storage). Absent water reserves, staff ensured that sufficient funds were budgeted to execute needed Supply Programs to meet demands. In 2018, Metropolitan is coming off the wettest year recorded in California, and water reserves are 2.5 MAF. Over the near term, Metropolitan does not need to exercise its storage programs as it did in 2014, 2015 and 2016. These uncertain hydrologic conditions demonstrate the dynamic planning environment in which Metropolitan operates.

2. Please provide the board action from which staff has derived its interpretation that the “maximum” reserve level is a “target” rather than a cap.

You have provided an interpretation of Administrative Code Section 5202. However, staff follows the plain language of the Administrative Code as adopted by the Board. The language of

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Metropolitan's current reserves policy was adopted by the Board in 1999 and is codified at Sections 5202 (a) and (e) of Metropolitan's Administrative Code, which states:

§ 5202. Fund Parameters.

The minimum cash and securities to be held in the various ledger funds as of June 30 of each year shall be as follows:

(a) For the Revenue Remainder Fund cash and securities on hand of June 30 of each year shall be equal to the portion of fixed costs of the District estimated to be recovered by water sales revenues for the eighteen months beginning with the immediately succeeding July. Such funds are to be used in the event that revenues are insufficient to pay the costs of the District.

(e) Amounts in the Water Rate Stabilization Fund shall be held for the principal purpose of maintaining stable and predictable water rates and charges. The amount to be held in the Water Rate Stabilization fund shall be *targeted* to be equal to the portion of the fixed costs of the District estimated to be recovered by water sales revenues during the two years immediately following the eighteen-month period referenced in Section 5202(a). Funds in excess of such *targeted* amount shall be utilized for capital expenditures of the District in lieu of the issuance of additional debt, or for the redemption, defeasance or purchase of outstanding bonds or commercial paper of the District as determined by the Board. Provided that the District's fixed charge coverage ratio is at or above 1.2 amounts in the Water Rate Stabilization Fund may be expended for any lawful purpose of the District, as determined by the Board of Directors, provided that any funds distributed to member agencies shall be allocated on the basis of all water sales during the previous fiscal year, such sales to include sales under the Interim Agricultural Water Program, Replenishment Service Program and all Full Service water sales.

The Board clearly set a minimum and *targeted* reserve balance amounts. There is no reference to a "cap" in the Administrative Code language.

3. *Please provide any analysis staff has performed demonstrating or supporting the staff's conclusion that use of a standby charge or other source of fixed revenue in lieu of ad valorem taxes is too "difficult or impractical" for MWD to implement.*

We responded to a similar comment by SDCWA's General Counsel in the attached March 23, 2018 letter. As we explained there, because Metropolitan bases its rate structure on cost of service principles, rate elements are not interchangeable as suggested. In your letter, you add the request for an explanation for the conclusion regarding the difficulty or impracticality of

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adopting any new charge, assessment, or tax on all property owners within Metropolitan's service area.

The ad valorem tax is uniquely appropriate as a fixed charge given Metropolitan's role as a regional wholesale supplier. Metropolitan provides a reliable supplemental water supply to all or portions of six counties in southern California. The ad valorem tax ensures that *all* property owning businesses and residents in Metropolitan's service area share in the cost of the availability of Metropolitan's services. All properties located within each of Metropolitan's 26 member agencies benefit from the availability of Metropolitan's supplemental wholesale water service to those agencies. Absent the ad valorem tax, many would contribute nothing to cover Metropolitan's costs.

As the resolutions suspending the ad valorem tax restriction of Section 124.5 have explained, Metropolitan's ad valorem property taxes are previously approved by the voters for State Water Contract indebtedness. Any new tax, charge, fee, or assessment on property owners within Metropolitan's entire service area would require approval by the entire service area. Thus, the adoption of a new fixed revenue source collected by property owners would be impractical. If SDCWA has any proposal for a fixed charge to be collected from Metropolitan's 26 member agencies, it may propose it to the Board for its consideration. Indeed, staff has proposed a fixed charge option for Treatment costs recently. However, that fixed charge was not approved by the Board, including the SDCWA representatives.

4. Please explain decreased Colorado River diversions planned for fiscal years 2020-2026.

Colorado River diversions are projected to decrease slightly during this period as demands of water users with high priority rights increase. These water users include Native American tribes and other users with present perfected rights for Colorado River water. As these uses increase, Metropolitan's water supplies decrease to keep California within its basic apportionment of 4.4 MAF.

5. Please explain why the 2018 forecast also reduces supply program expenditures from the 2016 forecast.

The answer to this question was explained in the answer to question #1.

6. Please provide rate modeling with alternatives assuming a high and low, or range of investment, in the California WaterFix.

The cost impacts of the California WaterFix options were discussed in the Board Workshop: California WaterFix held on March 27, 2018. The cost of any options, other than the option previously approved by the Board, are not anticipated to impact the costs in the period of the Proposed Biennial Budget. As explained above in our clarification of the SWP conveyance and

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aqueduct capital costs, the Proposed Biennial Budget includes only the costs pursuant to the option approved by the Board in October, 2017. If the Board were to approve any different option for participation in California WaterFix, the impact of any such option would not result until after the upcoming biennium. Therefore, any cost impacts from other WaterFix options, will be addressed in connection with WaterFix discussions.

7. *Please provide rate modeling taking into account budget and rate impacts of the offsetting benefits to MWD of the Water Authority's Colorado River water.*

As stated in the attached March 23, 2018 letter, no legal basis exists for SDCWA's request for "offsetting benefits." The Court of Appeal decision in *SDCWA v. Metropolitan*, 12 Cal.App.5th 1124, does not address whether Metropolitan "must calculate the offsetting benefits of the Water Authority's Exchange Agreement" fifteen years after the effectiveness of that agreement and this has not been part of the parties' litigation. Neither the Court of Appeal decision, nor any other law, requires that Metropolitan calculate any alleged "offsetting benefits."

Although SDCWA was not entitled to "offsetting benefits" under the 2003 exchange agreement, SDCWA received substantial benefits pursuant to that agreement. In accordance with the terms proposed and selected by SDCWA and agreed to by Metropolitan, as part of the transaction for the exchange of water, Metropolitan also assigned to SDCWA its \$235 million legislative appropriation for canal lining and other projects, as well as Metropolitan's rights to 77,000+ acre-feet of the resulting conserved canal lining water per year for 110 years.

8. *Please explain why staff is recommending a bond coverage ratio of 2.0, and provide analysis of what MWD's rate increases would be, if any, if the coverage ratio is lowered.*

Staff is recommending a bond coverage target of 2.0 because that is the Board's policy. The Board adopted the Revenue Bond Coverage Target of 2.0 times, which is codified at Administrative Code Section 5202(e). The Board's policy is financially prudent, because it allows Metropolitan to maintain strong bond ratings, reduce debt service costs to rate payers, retain access to capital markets at low costs and on better terms on a broad range of debt products, and provide assurance to bondholders that Metropolitan can fund operating expenditures and debt service costs with ample coverage. In addition, a financially sound utility consistently demonstrates an ability to fund all recurring costs, which includes the State Water Contract capital costs, which is reflected in the Board's Fixed Charge Coverage Target policy of 1.2 times.

The Board's financial management policies are prudent and have resulted in Metropolitan consistently having very high credit ratings and commensurately lower borrowing costs. The rating agencies look to these policies when reviewing Metropolitan's proposed borrowings. Metropolitan's CIP forecasts the use of bonds to finance a portion of the CIP. Maintaining the Board adopted coverage targets will ensure that Metropolitan will continue to have access to

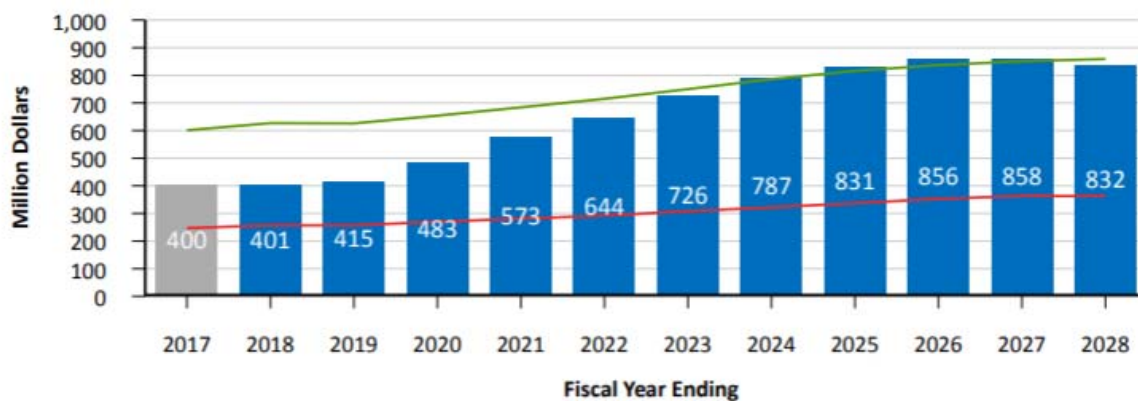
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capital markets on favorable terms. Should SDCWA wish to propose different coverage policies, it may do so through a proposal to the Board.

You have requested an analysis of what rate increases would be necessary if the coverage ratio is lowered, and we assume you are referring to the revenue bond coverage ratio. As you will note from page 1 of the Ten-Year Financial Forecast, Metropolitan’s Proposed Biennial Budget and rates and charges proposal do not meet the coverage ratio. The 2.0 coverage ratio is not expected to be met until FY 2021.



Overall Rate Increase	4.0%	4.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
Water Transactions *(MAF)	1.54	1.55	1.65	1.75	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
Rev. Bond Cvg	1.6	1.5	1.6	1.9	2.1	2.1	2.1	2.1	2.2	2.1	2.2	2.2
Fixed Chg Cvg	1.4	1.4	1.5	1.7	1.9	1.8	1.7	1.6	1.6	1.5	1.4	1.3
PAYGO, \$M	132	108	120	120	150	150	150	154	158	162	167	171

* includes water sales, exchanges and wheeling

As explained at Workshop #3, by the outer years of the ten-year financial forecast, the Fixed Charge Coverage will drive financial policy with regard to coverages; Revenue Bond Coverage will be whatever is necessary to ensure that the Fixed Charge Coverage target of 1.2 times is met.

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9. Staff should work to reconcile the budget and 10-year forecast with the IRP and MWD and member agency Urban Water Management Plans.

In July 2017, Metropolitan staff provided a presentation on Metropolitan's 2015 IRP Update and 2015 Urban Water Management Plan and their consistency with member agency Urban Water Management Plans. Metropolitan has comprehensive and collaborative planning processes, and maintains a comprehensive list of local projects from coordinated discussions with member agencies. These efforts are reflected in the Proposed Biennial Budget. Metropolitan's ten-year financial forecast of demands is based on the 2015 IRP Update, adjusted for additional permanent conservation achieved as a result of the regional initiative to meet the Governor's 2015 Executive Order mandating a 25 percent reduction in residential water use and offset by slower conversion of land for development.

10. The 3 percent rate increase in 2019 is not supported by the revenue requirement, which is lower than that required in 2018, unless the rates are set for the purpose of increasing reserves.

The revenue requirement in FY 2018/19 is lower than that required in FY 2017/18 due only to Revenue Offsets; the costs and required reserves are actually higher. More importantly, the water transactions over which the costs are recovered are lower in FY 2018/19. The budgeted water transactions for FY 2017/18 were 1.7 MAF; the budgeted water transactions for FY 2018/19 are 1.65 MAF. This results in fewer water transactions over which to recover costs, resulting in a necessary rate increase.³ Thus, the increase is set to recover Metropolitan's costs and to meet its financial policies.

As presented in Workshop #3, Metropolitan's financial policies, adopted by the Board, can also dictate the amount of revenues that needs to be generated. Metropolitan revenues must be sufficient on a fiscal year basis to meet both its cash revenue requirements and its two Board-adopted coverage targets. These sufficiency tests are commonly used to determine the amount of annual revenue that must be generated from an agency's rates. With regard to cash flow, this is the amount of annual revenues that must be generated in order to meet annual direct cash expenditures of the utility, including additions to required reserves. Metropolitan's revenue requirements reflect these cash flow obligations.

³ Metropolitan's proposed charges actually decrease slightly primarily due to less capital costs recovered through these charges. The Readiness-to-Serve (RTS) Charge only recovers system *capital* costs for emergency storage capacity and ensures there is adequate capacity in the conveyance and distribution systems to reliably deliver supplies during emergencies, major facility outages, hydrologic variability, and variances in local resources. The Capacity Charge only recovers distribution system *capital* costs necessary to meet peak day member agency needs on Metropolitan's distribution system during the summer.

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In addition, revenues must be sufficient to ensure that revenues meet all operating expenses and debt service obligations plus an additional multiple of that debt service. Metropolitan's Board established policy targets to retain or attain high bond ratings with correspondingly lower interest costs, as explained in Question #8 above. Metropolitan sets water rates and charges revenues at a level sufficient to ensure that both cash revenue requirements and coverage targets are met. In FYs 2018/19 and 2019/20, Metropolitan's proposed water rates and charges must generate revenues in excess of its cash revenue requirements in order to meet its policy for debt and fixed charge cover requirements. These additional revenues then become available to fund future capital projects, non-cash items, and unrestricted reserves.

Sincerely,



Gary M. Breaux
Assistant General Manager
Chief Financial Officer



Marcia L. Scully
General Counsel

cc: Metropolitan Board of Directors
SDCWA Board of Directors
Jeffrey Kightlinger, Metropolitan General Manager
Maureen Stapleton, SDCWA General Manager

Attachments:

Email from Director Lewinger, dated March 21, 2018, 12:25 p.m., attaching a letter regarding questions on Metropolitan's proposed budget and rates

Letter dated March 23, 2018 regarding Mr. Hattam's March 11, 2018 letter regarding the March 12 F&I Committee/Budget and Rates Workshop #3, and March 13, 2018 Board Meeting Agenda Item 4 Public Hearings

ATTACHMENT 1

Subject: FW: Lewinger Budget & Rate Questions
Attachments: 2018-03-21 WA ltr re MWD FYs 2019 & 2020 Budget.pdf

----- Original message -----

From: MWDProgram <MWDProgram@sdewa.org>
Date: 3/21/18 12:24 PM (GMT-08:00)
To: "Breux, Gary M" <GBreux@mwdh2o.com>
Cc: "Kightlinger, Jeffrey" <jkightlinger@mwdh2o.com>, "Castro, Rosa" <RCastro@mwdh2o.com>, "Barry Pressman (Barry.Pressman@cshs.org)" <Barry.Pressman@cshs.org>, Brett Barbre <brbarbre@msn.com>, "Charles Trevino (dirtrevino@gmail.com)" <dirtrevino@gmail.com>, Cynthia Kurtz <dirkurtz@gmail.com>, "De Jesus, David D" <DDeJesus@mwdh2o.com>, Donald Galleano <donald@galleanowinery.com>, Glen Dake <dirdake@gmail.com>, Glen Peterson <glenpsop@icloud.com>, "Gloria Cordero (dirgcordero@gmail.com)" <dirgcordero@gmail.com>, "Gloria Gray (ggrayi@aol.com)" <ggrayi@aol.com>, "Gloria Gray (mwdggray@gmail.com)" <mwdggray@gmail.com>, "Harold Williams (harldwms@gmail.com)" <harldwms@gmail.com>, "Hogan, Michael" <solbch1@roadrunner.com>, Janna Zurita <dirjzurita@gmail.com>, Jesus Quinonez <jquinonez@bushgottlieb.com>, John Morris <MorrisWater@Earthlink.net>, John Murray <jmurray@jwmjr.org>, Judy Abdo <jabdo@msn.com>, Larry Dick <larrydick@att.net>, Larry McKenney <director.mckenney@gmail.com>, Leticia Vasquez <dirlvasquez@gmail.com>, "Lewinger, Keith" <Keith.Lewinger@gmail.com>, Linda Ackerman <lindaackerman@cox.net>, Lorraine Paskett <dirpaskett@gmail.com>, Mark Gold <mgold@conet.ucla.edu>, "Marsha Ramos (Dir.mramos@gmail.com)" <Dir.mramos@gmail.com>, "Marsha Ramos (marsharamos@aol.com)" <marsharamos@aol.com>, "Michael Camacho (dircamacho@gmail.com)" <dircamacho@gmail.com>, "Michael Camacho (mcamacho@pacificaservices.com)" <mcamacho@pacificaservices.com>, "Michele Martinez (councilwomanmartinez@gmail.com)" <councilwomanmartinez@gmail.com>, "Michele Martinez (rflores@santa-ana.org)" <rflores@santa-ana.org>, Peter Beard <dirbeard@gmail.com>, "Randy A. Record" <dirrecord@gmail.com>, Richard Atwater <atwater.richard@gmail.com>, Russell Lefevre <r.lefevre@ieee.org>, "Saxod, Elsa" <saxod@cox.net>, "Steiner, Fern" <fsteiner@ssvwlaw.com>, Stephen Faessel <Dirfaessel@gmail.com>, Stevev Blois <sblois@verizon.net>, "Sylvia Ballin (dirballin@gmail.com)" <dirballin@gmail.com>, "Sylvia Ballin (sylviaballin@outlook.com)" <sylviaballin@outlook.com>, "William C. Gedney (wcedney@gswater.com)" <wcedney@gswater.com>, "Zareh Sinanyan (zsinanyan@glendaleca.gov)" <zsinanyan@glendaleca.gov>
Subject: Lewinger Budget & Rate Questions

Dear Mr. Breux,

Please find attached a letter from Director Lewinger regarding questions on MWD's proposed budget and rates.

Thank you.

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San Diego County Water Authority

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March 21, 2018

Gary Breaux
Chief Financial Officer/Assistant General Manager
Metropolitan Water District of Southern California
700 N. Alameda Street
Los Angeles, CA 90012-2944

MEMBER AGENCIES

- Carlsbad Municipal Water District
- City of Del Mar
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- City of Oceanside
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- City of San Diego
- Fallbrook Public Utility District
- Helix Water District
- Lakeside Water District
- Olivenhain Municipal Water District
- Otay Water District
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- Camp Pendleton Marine Corps Base
- Rainbow Municipal Water District
- Ramona Municipal Water District
- Rincon del Diablo Municipal Water District
- San Dieguito Water District
- Santa Fe Irrigation District
- South Bay Irrigation District
- Vallecitos Water District
- Valley Center Municipal Water District
- Vista Irrigation District
- Yuima Municipal Water District

RE: Budget and Rate Questions

Dear Mr. Breaux:

As discussed at the March 12, 2018 Finance and Insurance Committee meeting and workshop, here are the questions we request staff address in writing, in a time frame that gives us a chance to review your responses and supporting documentation before the next workshop. The Water Authority's General Counsel has previously submitted a letter regarding the proposed budget and rates (Attachment 1) and we request that you also respond to the issues and questions in that letter in writing in advance of the next board workshop so that everyone has time for review.

At the outset, I must express my continued frustration at the manner in which staff has presented the budget and proposed rates, with general descriptions of methodology and voluminous data, but without any means to replicate or track how the data has actually been used in setting rates and charges or confirm whether the methodology described by MWD has actually been followed. Since MWD refuses to allow access to the rate model, we ask that staff identify for each schedule of budgeted expenses the "destination," in terms of how and where the expenses on each schedule are funded and by which fee or by ad valorem taxes; in other words, how each schedule of expense has been identified and allocated and on what basis to a cost of service category. Given the shortness of time, we request this information be made available as soon as possible.

One example of the kind of difficulty we have experienced in attempting to review the budget and cost of service report without access to the rate model is as follows, regarding California WaterFix costs:

Statement from Page 83, Attachment 3, Board Letter 9-2:

*"With regard to California WaterFix costs, **consistent with the treatment of SWP Conveyance and Aqueduct costs**, 51 percent of costs are allocated to Fixed Commodity, which is recovered through the System Access Rate, and 49 percent of costs are allocated to Fixed Demand and Fixed Standby, which is recovered through the Readiness -to-Serve Charge in FY 2018/2019" (emphasis added).*

Attachment 3, Page 133 of 259, shows that California WaterFix costs (\$3.574M in 2019) in fact have been allocated as follows:

50.9% to Fixed Commodity (SAR)

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Mr. Breaux

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20.9% to Fixed Demand (RTS)

28.3% to Fixed Standby (RTS)

And, **Schedule 10 of Board Letter 9-2, Attachment 3, Page 81 of 259**, also states that SWP Conveyance and Aqueduct is allocated:

51% to Fixed Commodity

21% to Fixed Demand

28% to Fixed Standby

But **Schedules 12 and Schedule 13 from Attachment 3, pages 85 and 86 of 259** for SWP other (SWP Conveyance and Aqueduct, non-power) shows a cost allocation as follows:

\$243.7 M to Fixed Commodity, or **95.7% not 51%**

\$4.7 M to Fixed Demand, or **1.8% not 21%**

\$6.4 M to Fixed Standby, or **2.5% not 28%**

Please provide an explanation and correction as necessary.

While appreciated, the information staff has provided in PowerPoint presentations during MWD committee and workshop meetings in and of itself has been at such a high level of detail, that it is not possible to consider changes that could result, for example, in lowering proposed spending or borrowing, lowering rate increases, modifying board policies such as funding of capital projects on a PAYGo basis rather than debt financing, maximum coverage ratios or reserve levels, or how surplus revenues are applied to offset future rates, fees or taxes, among many other policy choices. While we feel frustrated as directors at not being able to secure access to information in a form that is useful for budget deliberations, at the very least we must have information sufficient to meet our responsibility to ratepayers in reviewing the accuracy of the proposed budget and rates.

Here are our additional questions.

1. ***Please explain why the water supply costs in the 2016 and 2018 financial forecasts vary so significantly.*** Although the sales assumptions in the 2016 and 2018 financial forecasts are largely the same (indeed, the 2018 forecast assumes 50,000 AF of additional water sales in 2021 and 2022), supply related expenses in 2026 are \$300 million less (by more than 22 percent) in the 2018 forecast. Please provide a detailed explanation for this reduction in the supply related expenses and changed forecast.
2. ***Please provide the board action from which staff has derived its interpretation that the "maximum" reserve level is a "target" rather than a cap.*** MWD Administrative Code Section 5202 governs MWD fund parameters, with subpart (a) requiring that ***minimum reserves*** be maintained at a level sufficient to pay eighteen months of fixed costs, as prescribed. Subpart (e) establishes ***maximum reserves*** at a level sufficient to pay an additional two years of fixed costs, as prescribed, following the 18-month period referenced in Section 5202(a). The purpose of the minimum and maximum reserve levels is to ensure adequate funds are available to pay district costs in the event of reduced sales, while discouraging the accumulation of funds in excess of the maximum reserve level. The formulas used to establish the minimum and maximum reserve levels were developed as part of the 1999 Long Range Finance Plan, after significant input from member agencies who were reasonably concerned that MWD not collect

March 21, 2018

Mr. Breaux

Page 3

more revenue than reasonably necessary to pay its costs. See 2004 Long Range Finance Plan at page 52 (Attachment 2). We can find no board action that changed this board policy or explanation why rates should now be set to "target" or exceed maximum reserves, rather than recognizing the maximum reserve level is intended as a *cap* on the amount of funds held in the Water Rate Stabilization Fund. Please advise how and when staff believes the board changed this policy.

3. Please provide any analysis staff has performed demonstrating or supporting the staff's conclusion that use of a standby charge or other source of fixed revenue in lieu of ad valorem taxes is too "difficult or impractical" for MWD to implement. In continuing to recommend suspension of the tax rate limitation under Section 124.5 of the MWD Act, staff has repeatedly made the statement to the board that alternative sources of fixed revenue in lieu of ad valorem taxes are too "difficult" or "impractical" to implement. What is the basis of staff's contention that other sources of fixed revenue are not available to the board of directors such that they should be taken off the table for consideration to increase fixed revenues? Please provide any written legal opinion or staff analysis supporting this conclusion. Imposition of taxes as contrasted with other fixed charges could have materially different impacts on different customers, and the chosen methodology should be supported by cost of service.

4. Please explain decreased Colorado River diversions planned for fiscal years 2020-2026. Given that staff is projecting the same or higher water sales during these years, please explain why MWD plans to reduce its Colorado River diversions.

5. Please explain why the 2018 forecast also reduces supply program expenditures from the 2016 forecast. On top of reduced Colorado River supplies, the budget forecast also reduces supply program expenditures in spite of projections of increased sales (for example, a 27 percent expenditure reduction in 2026). Please explain.

6. Please provide rate modeling with alternatives assuming a high and low, or range of investment, in the California WaterFix. The 2018 budget and rate forecast assumes only one cost scenario for the California WaterFix, namely, the current board-authorized investment, capped at a 25.9 percent share and \$4.3 billion. Since implementation within this limitation is no longer viable, and with the staff having announced its plan to ask the board to consider other options that would cost more, a full range of potential budget and rate impacts should be modeled in the proposed budget. Given that the State Water Project is MWD's largest single cost component (forecasted to be at 42 percent of the operations budget in 2028, assuming only a 25.9 percent WaterFix participation) every effort should be made to refine projections by modeling real potential alternatives.

7. Please provide rate modeling taking into account budget and rate impacts of the offsetting benefits to MWD of the Water Authority's Colorado River water. The Water Authority's Chair Muir has raised this issue with Chair Record over the past several months, and the Water Authority's General Counsel reiterated the request in his letter of March 11, 2018 that MWD calculate the offsetting benefits of the Water Authority's Colorado River supplies. It would be prudent for the board to factor this offset into its budget and rates for 2019 and 2020 and future years given the Court of Appeal decision.

8. Please explain why staff is recommending a bond coverage ratio of 2.0, and provide analysis of what MWD's rate increases would be, if any, if the coverage ratio is lowered. Given that MWD has significant reserves (and has budgeted to collect additional revenues to equal or exceed the maximum reserves) and taxing authority (and has actually suspended the tax limitation), a coverage ratio of 2.0 is

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Mr. Breaux

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unnecessarily high (without even taking into account the PAYGo tactic addressed in the March 11 letter). Please provide an analysis of what rate increases would be necessary if the coverage ratio is lowered to 1.5. Every dollar that MWD unnecessarily over-collects is one less dollar available to its member agencies for the development of local water supplies.

9. Staff should work to reconcile the budget and 10-year forecast with the IRP and MWD and member agency Urban Water Management Plans. There is a dangerous "disconnect" between MWD's budget, Integrated Resources Plan and the Urban Water Management Plans of MWD and its member agencies, which threatens to result in wasted money and stranded costs. The unrealistic WaterFix assumption that has been budgeted is noted above. While staff has identified "maximizing local resources" as one of its funding strategic priorities, only the cost of the demonstration stage for the Regional Recycled Program with the Los Angeles Sanitation Districts is included in the budget and ten-year forecast (although the capital cost is between \$2.5 and \$3 billion) and LRP funding is projected to remain constant. MWD's budget should be measured against the real projected demand for MWD water as established by the member agencies' Urban Water Management Plans.

10. The 3 percent rate increase in 2019 is not supported by the revenue requirement, which is lower than that required in 2018, unless the rates are set for the purpose of increasing reserves. For all of the reasons stated in this letter, it is clear that MWD has set its revenue requirement for the 2018 rate setting at a level that is far higher than necessary to meet its reasonable and necessary costs.

As noted at the outset, we would appreciate your response to these questions and comments, and if you would provide the additional analyses and modeling as requested in advance of the next finance committee meeting and board workshop. We would also appreciate your response to our General Counsel's March 11 letter.

Sincerely,



Keith Lewinger
Director

Attachment 1: March 11, 2018 letter from Mark Hattam to Randy Record and Board Members

Attachment 2: MWD Administrative Code §5202, and excerpts from 2014 Long Range Finance Plan

cc: MWD Board of Directors

Jeff Kightlinger, MWD General Manager

Water Authority Board of Directors

Maureen A. Stapleton, Water Authority General Manager



San Diego County Water Authority

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March 11, 2018

Randy Record, Chairman
and Board of Directors

Metropolitan Water District of Southern California

P.O. Box 54153

Los Angeles, CA 90054

MEMBER AGENCIES

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OTHER REPRESENTATIVE

County of San Diego

RE: March 12 Finance and Insurance Committee/Budget and Rates Workshop #3
Agenda Item 8: Budget and Rates Workshop #3

March 13, 2018 Board Meeting Agenda Item 4 Public Hearings

Public hearing to consider whether to continue suspending the tax rate limitations in Section 124.5 of the Metropolitan Water District Act to maintain the ad valorem tax rate for fiscal years 2018/19 and 2019/20

Public hearing on proposed water rates and charges for calendar years 2019 and 2020 to meet revenue requirements

Dear Chairman Record and Board Members:

On behalf of the San Diego County Water Authority, the purpose of this letter is to make a formal request for records as stated below, and, provide high level comments and questions on Board Memo 8-1 dated February 13, 2018 setting this combined public hearing and Information Board Memo 9-2 of the same date on the subject: Proposed biennial budget and revenue requirements for fiscal years 2018/19 and 2019/20; proposed water rates and charges for calendar years 2019 and 2020 to meet revenue requirements for fiscal years 2018/19 and 2019/20; ten-year forecast; and Cost of Service Report (collectively, the "Budget Document").

I. The Budget Document lacks sufficient detail to track past or proposed expenditures, or determine how MWD has allocated its costs to arrive at the proposed rates and charges

The Water Authority's board representatives have repeatedly requested that staff provide projected actual expenditures by line item and category as part of the budget and rate setting process. This information is essential to meaningful deliberation of MWDs proposed revenue requirements and is standard industry practice in budgeting and rate setting for public utilities. While we are aware that the PowerPoint slides for March 12 include "budget vs actual" charts, they do not provide the level of detail needed for meaningful review. We request again that the data by line item and category be provided, in addition, and that the projected actuals be included where budget data is presented in

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the final Budget Document.

II. MWD's Cost of Service methodology is flawed because it fails to analyze cost causation or account for or assign costs by customer class

Separate and apart from the fact that it is not possible to replicate how MWD has assigned its costs to rates without access to its rate model, the underlying methodology is obviously flawed due to MWD's failure to analyze or account for the varying demands and service characteristics of its 26 member agencies, which MWD admits exist. One of the basic principles of cost of service and ratemaking is to group customers with similar demand and usage patterns in common categories (classes), so that costs may be assigned to the customer classes that cause these costs to be incurred. In spite of the different service patterns and use characteristics of MWD's member agencies, MWD has simply declared by legislative fiat that it has only one customer class.

Historically, MWD has claimed that Proposition 26 and cost of service requirements do not apply to its rates, and that the only test is one of "reasonableness." Although the Court of Appeal in the 2010/2012 Rate Case clearly applied Proposition 26, MWD persists in insisting that Proposition 26 and cost of service requirements do not apply to MWD's rates.ⁱ

III. Request for public records under California Public Records Act (Gov. Code § 6250 *et seq.*)

As you know, the Water Authority is seeking public disclosure of the rate model MWD uses to allocate costs and set its rates and charges. We filed a Public Records Act (PRA) request on February 18, 2016 (Attachment 1), requesting disclosure of the 2016 rate model and various data, analyses and studies as described in paragraphs 1-8 of that letter. We hereby make formal demand for the 2018 rate model and all supporting data as described in paragraphs 1-8 and any other "input" MWD relied on to establish the 2018 proposed rates and charges for calendar years 2019 and 2020. We also request:

1. A copy of the "Financial Planning Model Manual" Mr. Van den Berg identified and described during his deposition on May 11, 2017 (at pages 69-72).
2. A functional copy of the 2018 Budget Document as it is maintained in the ordinary course of business, in which the links are not disabled.

IV. Written Request for Notice (Gov. Code §54999.7(d); Request for Data and Proposed Methodology for Establishing Rates and Charges (Gov. Code § 54999.7(e))

The Water Authority hereby makes formal request to be provided with all of the data and proposed methodology MWD will rely upon for establishing rates, charges and surcharges or fees for 2019 and 2020 in accordance with the above-listed Government Code provisions. The Water Authority and its MWD board delegates have previously requested this information but thus far none has been provided except as contained in the Budget Document.

March 11, 2018
Chairman Record and Board Members
Page 3

With only one month remaining before the MWD board votes on the proposed rates and charges, not all of the underlying data "input" has been provided to MWD's member agencies or the public except in the summary form contained in the Budget Document. Obviously, not all information has been made available prior to the public hearing on March 13, 2018. Given MWD's assertions about the complexity of its ratemaking process, with a rate model that purportedly consists of more than 350,000 mathematical formulas, links and calculations, MWD's failure to provide the requested information is wholly unacceptable and contrary to law.

V. There is no demonstrated justification for suspension of the ad valorem tax rate limitation

As expressed by the Water Authority on many prior occasions, Section 124.5 of the MWD Act allows the board to suspend the tax limitation, but only after it finds that the suspension is "essential to the fiscal integrity of the district." The purported reason for the proposed suspension in 2019 and 2020 is to "pay for growing State Water Contract costs" and to "help maintain a balance between fixed and variable revenues, and reduce the impact of future water rate increases." However, this justification is not supported by data and is flawed.

First, the proposed tax rate suspension—in order to "reduce the impact of future water rate increases—is contrary to the legislative history of Section 124.5, which expressed the intent that taxes be reduced and that user rates and charges constitute the great preponderance of MWD's revenues. A greater reliance on rates over taxes also better allows costs to be assigned to the customer groups that cause specific costs to be incurred.

While MWD's objective of maintaining a balance between fixed and variable revenues is certainly proper, reducing the very charges the Legislature provided to MWD to be used in lieu of property taxes is inconsistent with that objective. The proposed suspension of the tax rate will increase MWD's tax revenues by 16 percent between 2018 and 2019, but the readiness-to-serve (RTS) charge is proposed to decrease by 5 percent during the same period. In fact, the pattern of *decreasing* RTS and *increasing* tax revenues carries forward in the proposed financial forecast.

When comparing the financial forecast proposed in this budget and the one adopted in 2016, MWD is projecting a higher tax revenue trend (staff is apparently planning to continue the tax rate limitation suspension indefinitely), and a lower RTS collection during the same period. As an example, in 2026, the projected RTS collection would be 15 percent lower than that projected for the same year in the 2016 biennial budget, while the projected tax revenues for the same year (2026) is 5.5 percent higher than previously forecasted.

Finally, MWD staff reported that State Water Contract (SWC) costs are projected to be reduced from what was previously forecast due to delayed implementation of WaterFix and MWD's staff's successful negotiation with Department of Water Resources to reduce future expenditures. Since

March 11, 2018
 Chairman Record and Board Members
 Page 4

these costs are less than the fiscal year 2018 budgeted SWC costs (and the SWC costs forecasted in the adopted financial forecast for fiscal year 2019), staff's justification for the tax rate limitation suspension -- because it purportedly is needed to cover "growing" SWC costs -- is baseless.

VI. The purported PAYGo Funding policy and "Resolution for Reimbursement" would allow revenues to be collected for one purpose but used for another without any consideration of or adjustment for cost of service requirements

The Water Authority strongly opposes the so-called "Resolution for Reimbursement." MWD apparently plans to use PAYGo revenues as a discretionary fund, by adopting a "Resolution for Reimbursement" to allow the use of revenues from PAYGo to pay for operations expenses, before a need is even identified. This resolution would authorize staff to prospectively collect \$120 million annually for one purpose (CIP) but then potentially use it for another purpose (O&M or California WaterFix). This is not only an unsound fiscal strategy lacking in transparency, but it also deliberately avoids any accountability ("true up") or tie to cost of service. The board should make a decision now on whether to raise rates, plan to borrow money or, notably, reduce costs rather than engage in the gimmick of the proposed Resolution.

VII. Demand that MWD set aside principal and prejudgment interest at 10% for the WSR Exchange Agreement overcharges consistent with Court of Appeal decision

In February Board Memo 9-1, the following is stated on page 5:

"Metropolitan holds \$52.8 million in its financial reserves in accordance with the set-aside provision of the 2003 Amended and Restated Exchange Agreement between Metropolitan and SDCWA (exchange agreement). This amount includes \$51 million associated with exchange agreement water deliveries from January 2011 through October 2017 and \$1.8 million in accumulated interest earned thereon, based on Metropolitan's investment portfolio."

We believe this set-aside is too low, and not in compliance with the Court of Appeal's decision, where the Court stated, on pages 1155-56 of its decision:

"Metropolitan contends the statutory rate of interest was wrongly used in the original proceedings because the exchange agreement stipulates a contractual rate. This contention is unsupported by the terms of the exchange agreement, as the trial court rightly held."

MWD is well aware that the prejudgment interest rate found by the trial court is 10 percent, not the rate "based on Metropolitan's investment portfolio." Our calculations show that the actual amount that should be reserved by MWD through 2018 is approximately \$87 million, which includes both principal and prejudgment interest – leaving about a \$34 million deficit in what MWD is now actually

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Page 5

withholding and reporting to the Board. If MWD's Board approves not charging the Water Stewardship Rate (WSR) to the Exchange Agreement water through the rest of 2018, that total will of course drop slightly. Demand is hereby made by the Water Authority that MWD properly set aside all principal and prejudgment interest at 10% for the WSR Exchange Agreement overcharges through 2018, or any earlier date the MWD board may end the overcharges in 2018.

VIII. Demand that MWD not impose its Water Stewardship Rate on any wheeled water

In February Board memo 9-1, MWD seeks approval by its Board to suspend imposition of WSR charges on Exchange Agreement water, while still imposing them on other wheeling transactions. For example, see page 5 of February Board memo 9-1, which states that the reduction applies only to Exchange Agreement water, with no mention of other wheeled water:

“[I]t is proposed that the Water Stewardship Rate will not be billed on the exchange agreement deliveries for CYs 2019 and 2020, with Metropolitan foregoing any collection of these amounts during this study period. Further, it is recommended that Metropolitan suspend billing and collecting the current Water Stewardship Rate on exchange agreement deliveries in CY 2018.”

See also page 102 of Attachment 3 to the above document, which makes clear wheeled water would be assessed WSR charges (emphasis added): “All system users (member agency *or third parties*) will pay the same proportional costs for existing and future conservation and recycling investments.”

However, the Court of Appeal's ruling was based on the Wheeling Law (Water Code sections 1810 *et seq.*), and the Court found that under that law MWD cannot charge the WSR on wheeled water: “A water agency's payments to its members to encourage water conservation is outside the scope of recoverable costs contemplated by the wheeling statutes.” *Id.* at 1150.

MWD's decision to impose WSR charges on wheeled water is in clear violation of the Court of Appeal's decision, and thus unlawful. Though we appreciate the fact that MWD staff recommends not making unlawful charges against the Exchange Agreement, it is clear that MWD may not impose the same unlawful charges to all other wheeling transactions. Demand is hereby made by the Water Authority that MWD not adopt rates that allow for WSR charges to be assessed against wheeled water.

IX. Request for calculation of offsetting benefits under the Wheeling Statute

As you are aware, the Court of Appeal determined that the Wheeling Statutes apply to the Exchange Agreement between MWD and the Water Authority. Accordingly, under Water Code § 1811(c), and consistent with MWD Board Resolution 8520, MWD must calculate the offsetting benefits of the Water Authority's Exchange Agreement water. Because MWD's wheeling rate, and the Water Authority's price under the Exchange Agreement, is calculated in part based on the setting of MWD's

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Page 6

annual rates, MWD should perform this calculation now as part of this budget and rate-setting cycle, so that these costs may properly be reflected in MWD's budget, and long term planning and disclosure documents. The Water Authority identified this issue to MWD last November as a litigation issue remaining to be resolved between MWD and the Water Authority, but as you are aware, the MWD and Water Authority negotiating teams have not yet met.

X. Conclusion

Our MWD board representatives have additional policy questions and comments that will be presented separately.

Sincerely,



Mark J. Hattam
General Counsel

Attachment: Water Authority's Public Records Act request for MWD rate model, dated February 18, 2016

cc: MWD Board of Directors
Water Authority Board of Directors
Maureen Stapleton, General Manager

ⁱ Contrary to a recent public statement by one of Metropolitan's attorneys, the Court of Appeal did in fact apply Proposition 26 to Metropolitan's rates.



San Diego County Water Authority

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February 18, 2016

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Fallbrook
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Lakeside Water District

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Santa Fe Irrigation District

South Bay Irrigation District

Vallecitos Water District

Valley Center
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Vista Irrigation District

Yuima
Municipal Water District

OTHER REPRESENTATIVE

County of San Diego

Ms. Dawn Chin
Board Executive Secretary
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

Re: Request for Records Under California Public Records Act
(California Gov. Code § 6250 *et seq.*)

Dear Ms. Chin:

On behalf of my client, the San Diego County Water Authority ("SDCWA"), and pursuant to the California Public Records Act ("PRA"), California Government Code section 6250 *et seq.*, we request the following public records which are in the possession or control of the Metropolitan Water District of Southern California (hereinafter "MWD"). "MWD," as used herein, includes MWD itself, MWD's officers, representatives, agents, employees, affiliates, accountants, consultants, attorneys, MWD's Board of Directors, its individual directors, and any and all persons acting on MWD's behalf. "MWD's Board" and "MWD's Board of Directors," as used herein, includes the Board of Directors as a whole, its directors and all relevant Standing, Ad Hoc, Special Purpose, Temporary Committees, and all other appointments.

This request applies to every such record that is known to MWD and which MWD can locate or discover by reasonably diligent efforts. More specifically, the records that may contain information called for by this request include:

- Documents, communications, letters, memoranda, notes, reports, papers, files, books, records, contracts, agreements, telegrams, electronic mail (saved or deleted), and other communications sent or received;
- Printouts, diary entries and calendars, drafts, tables, compilations, tabulations, charts, spreadsheets, graphs, recommendations, accounts, worksheets, logs, work papers, minutes, notes, summaries, speeches, presentations, and other written records or recordings of or relating to any conference, meeting, visit, interview, or telephone conversations;
- Bills, statements, invoices, and other records of any obligation or expenditure, cancelled checks, vouchers, receipts, and other records of payment;
- Financial and statistical data, analyses, surveys and schedules;
- Audiotapes and videotapes and cassettes and transcripts thereof, affidavits, transcripts of testimony, statements, interviews, and conversations;

Ms. Dawn Chin
February 18, 2016
Page 2

- Printed matter (including published articles, speeches, newspaper clippings, press releases, and photographs); and
- Microfilm and microfiche, disks, computer files, electronically stored data (including the metadata associated with any such written and/or spoken content), electronically stored information, electronic devices, film, tapes, and other sources from which information can be obtained, including materials used in electronic data processing. "Electronic" means relating to technology having electrical, digital, magnetic, wireless, optical, electromagnetic, or similar capabilities. "Electronically stored information" means information that is stored in an electronic medium, including data, metadata, and all electronically stored data or information.

The term "related to," as used in each category of public record listed below, means directly or indirectly, in whole or in part, comprising, referring to, concerning, evidencing, connected with, commenting on, affecting, responding to, showing, describing, discussing, analyzing, reflecting or constituting.

The term "rate model," as used in each category of public record listed below, means all documents, data, analyses, calculations, studies or other information that constitute, comprise, support or describe the manner in which MWD assigns costs to rates, including but not limited to its "financial planning model," including the spreadsheet, formulas and programming code.

If a record responsive to a request was, but no longer is, in your possession, custody, or control, state precisely what disposition was made of it (including its present location and who possesses or controls it) and identify the person(s) who authorized or ordered such disposition.

Records produced in response to this request should be produced as they are kept in the usual course of business or should be organized and labeled to correspond with the categories in the request. All electronically stored information shall be produced in its native format with all metadata intact.

The requested records are:

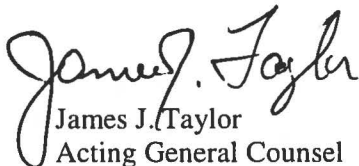
1. Any rate model or models used in formulating proposed rates for the 2017 and 2018 calendar years.
2. All data, analyses and studies, if any, and cost of service analysis used to generate or supporting the rates and charges proposed for the 2017 and 2018 calendar years, as described in MWD Board Memo 9-2 dated 2/9/2016 (Finance and Insurance Committee).
3. All data, analyses and studies, if any, and cost of service analysis used to generate or supporting a proposed reduction of the Readiness-to-Serve and Capacity Charges for 2017.
4. All data, analyses and studies, if any, demonstrating the proportionate benefit each of MWD's 26 customer member agencies will receive from the expenditure of revenues collected from the rates and charges proposed for the 2017 and 2018 calendar years.
5. All data, analyses and studies, if any, that support the conclusion that demand management programs provide distribution and conveyance system benefits, including identification of those parts of the distribution and conveyance system where additional capacity is needed and the customer member agencies that benefit from that capacity being made available.

Ms. Dawn Chin
February 18, 2016
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6. All data, analyses, opinions and studies, if any, that support the conclusion that suspension of the property tax restriction in Section 124.5 of the MWD Act is essential to MWD's fiscal integrity, as described in MWD Board Memo 9-2 at page 3.
7. All data, analyses and studies, if any, supporting the findings, conclusions, recommendations and water supply development targets identified in MWD's 2015 IRP Technical Update Issue Paper Addendum.
8. All data, analyses and studies, if any, supporting the findings, conclusions, recommendations and water supply development targets identified in MWD's Integrated Water Resources Plan 2015 Update.

Within ten (10) days of receipt of this PRA request, please contact me at (858) 522-6791 to discuss whether MWD has records responsive to this request, the page count and cost of copying the records, and whether the documents are also available in electronic format.

Sincerely,


James J. Taylor
Acting General Counsel

cc: MWD Public Records Administrator (by email at praadministration@mwdh2o.com)

paragraph (j)(k) added by M.I. 40272 - June 15, 1993; paragraph (h) amended and paragraph (l) added by M.I. 40273 - June 15, 1993; paragraphs (a), (b), and (j) amended by M.I. 40388 - August 24, 1993; paragraph (j) amended and paragraph (m) added by M.I. 40443 - September 21, 1993; paragraph (n) added by M.I. 41581 - September 12, 1995; paragraphs (b)(c)(h)(j)(k)(l)(n) amended by M.I. 42817-- February 10, 1998; paragraphs (b), (c), and (j) amended April 1998 by authority granted the General Counsel by M.I. 42817 - February 10, 1998; paragraph (o) added by M.I. 43434 - March 9, 1999; paragraphs (a)-(c), and (j) amended by M. I. 45249 - March 11, 2003; paragraph (n) amended by M. I. 45775 - June 8, 2004; paragraph (p) added by M. I. 46266 - June 14, 2005; amended paragraph (b), added paragraph (c), and renumbered paragraphs (d) through (q) by M.I. 50498 - June 14, 2016.

§ 5202. Fund Parameters.

The minimum cash and securities to be held in the various ledger funds as of June 30 of each year shall be as follows:

(a) For the Revenue Remainder Fund cash and securities on hand of June 30 of each year shall be equal to the portion of fixed costs of the District estimated to be recovered by water sales revenues for the eighteen months beginning with the immediately succeeding July. Such funds are to be used in the event that revenues are insufficient to pay the costs of the District.

(b) For the Replacement and Refurbishment Fund, any unexpended monies shall remain in the Fund for purposes defined in Section 5109, or as otherwise determined by the Board. The end-of-year fund balance may not exceed \$160 million. Available monies in excess of \$160 million at June 30 shall be transferred to the Water Rate Stabilization Fund, unless otherwise determined by the Board.

(c) Amounts remaining in the Revenue Remainder on June 30 of each year after meeting the requirements set forth in Section 5202(a) shall be transferred to the Water Rate Stabilization Fund and to the extent required under Section 5202(d), to the Water Treatment Surcharge Stabilization Fund.

(d) After making the transfer of funds as set forth in Section 5202(c), a determination shall be made to substantially identify the portion, if any, of such transferred funds attributable to collections of treatment surcharge revenue in excess of water treatment cost and to collections of water stewardship rate revenue in excess of costs of the Conservation Credits Program, Local Resources Program seawater desalination and similar demand management programs, including the departmental operations and maintenance costs of administering these programs. Such funds shall be transferred to the Water Treatment Surcharge Stabilization Fund and the Water Stewardship Fund, respectively, to be available for the principal purpose of mitigating required increases in the treatment surcharge and water stewardship rates. If such determination indicates a deficiency in treatment surcharge or water stewardship rate revenue occurred during the fiscal year, a transfer of funds shall be made from the Water Treatment Surcharge Stabilization Fund or the Water Stewardship Fund, as needed and appropriate, to reimburse funds used for the deficiency. Notwithstanding the principal purpose of the Water Treatment Surcharge Stabilization Fund and the Water Stewardship Fund, amounts assigned to these fund shall be available for any other lawful purpose of the District.

(e) Amounts in the Water Rate Stabilization Fund shall be held for the principal purpose of maintaining stable and predictable water rates and charges. The amount to be held in the

Water Rate Stabilization fund shall be targeted to be equal to the portion of the fixed costs of the District estimated to be recovered by water sales revenues during the two years immediately following the eighteen-month period referenced in Section 5202(a). Funds in excess of such targeted amount shall be utilized for capital expenditures of the District in lieu of the issuance of additional debt, or for the redemption, defeasance or purchase of outstanding bonds or commercial paper of the District as determined by the Board. Provided that the District's fixed charge coverage ratio is at or above 1.2 amounts in the Water Rate Stabilization Fund may be expended for any lawful purpose of the District, as determined by the Board of Directors, provided that any funds distributed to member agencies shall be allocated on the basis of all water sales during the previous fiscal year, such sales to include sales under the Interim Agricultural Water Program, Replenishment Service Program and all Full Service water sales.

Notwithstanding the fund parameters set forth in this Section 5202, including, but not limited to, any minimum fund balances or specified uses and purposes, all amounts held in the foregoing funds shall be available to pay interest on and Bond Obligation (including Mandatory Sinking Account Payments) of Water Revenue Bonds issued pursuant to Resolution 8329 adopted by the Board on July 9, 1991, as amended and supplemented (the Master Resolution), and Parity Obligations, and Subordinate Water Revenue Bonds, issued pursuant to Resolution 9199 adopted by the Board on March 8, 2016, as amended and supplemented (the Master Subordinate Resolution). Capitalized terms not defined in this paragraph shall have the meanings assigned to such terms in the Master Resolution and the Master Subordinate Resolution.

Section 331.2 - M.I. 32735 - May 8, 1979, effective July 1, 1979 [Supersedes M.I. 30984 - August 19, 1975; M.I. 31826 - June 14, 1977 and M.I. 32292 - June 13, 1978]; amended by M.I. 35309 - September 11, 1984; amended by M.I. 35730 - July 9, 1985. Section 331.2 repealed and Section 5201 adopted by M.I. 36464 - January 13, 1987, effective April 1, 1987; paragraph (a) amended and paragraph (b) added by M.I. 36676 - June 9, 1987; paragraph (a) amended by M.I. 36731 - July 14, 1987; paragraph (b) amended and paragraph (c) added by M.I. 37007 - February 9, 1988; amended by M.I. 37449 - December 13, 1988; paragraph (a) amended by M.I. 37679 - May 9, 1989; renumbered to Section 5202 by M.I. 38241 - May 8, 1990; paragraphs (c) and (d) amended by M. I. 38304 - June 12, 1990; paragraph (a) amended by M.I. 39794 - August 20, 1992; paragraph (e) added by M.I. 41581 - September 12, 1995; Section renamed and paragraphs (a)-(c) and (e) amended by M.I.43434 - March 9, 1999; paragraph (e) amended by M.I. 43587 - June 8, 1999; paragraph (b), (c) and (e) amended by M. I. 44907 - June 11, 2002; paragraph (b) amended by M. I. 45904 - September 14, 2004; paragraph (d) amended by M. I. 46266 - June 14, 2005; Paragraph (e) amended by M. I. 46838 - October 10, 2006; final paragraph added by M.I. 47286 - November 20, 2007; amended paragraph (e) by M.I. 50498 - June 14, 2016.

§ 5203. Indirect Credit of District.

The General Manager may negotiate with the Department of Water Resources on the basis of using the indirect credit of the District to finance State Revenue Bonds so long as the obligation of the District thereunder does not exceed the obligation required under the State Contract.

Section 331.2 renumbered 331.3. Section 331.3 repealed and Section 5202 adopted by M.I. 36464 - January 13, 1987, effective April 1, 1987; renumbered to Section 5203 by M.I. 38241 - May 8, 1990.

§ 5204. Compliance with Fund Requirements and Bond Indenture Provisions.

As of June 30 of each year, the General Manager shall make a review to determine whether the minimum fund requirements outlined in this Chapter have been met and whether the

14. Financial Indicators

Metropolitan monitors various indicators of its financial strength and flexibility. The following discussion summarizes forecasted trends in these indicators, resulting from the forecasted expenditures and receipts, including assumed changes in rates and charges.

14.1. Financial Ratios

Financial ratios are key indicators commonly used by rating agencies and the investment community to measure a municipal utility's financial strength. Metropolitan's existing financial policies include goals of maintaining revenue bond debt service coverage of at least 2.00 times and fixed charge coverage of 1.2 times.

14.1.1. Revenue Bond Debt Service Coverage

Revenue bond debt service coverage is one of the primary indicators of credit quality, and is calculated by dividing net operating revenues by debt service. This measures the amount that net operating revenues exceed or "cover" debt service payments over a period of time. Higher coverage levels are preferred since they indicate a greater margin of protection for bondholders. For example, a municipality with 2.00 times debt service coverage has twice the net operating revenues required to meet debt service payments. The LRFPP forecasts that Metropolitan's debt service coverage ratio averages 2.1 times through 2014 ranging from a low of 2.0 times to a high of 2.5 times. The median coverage ratio for AA rated water systems by Standard & Poor's was 2.77 times in 2001. Metropolitan's minimum coverage policy is key to continued strong credit ratings and low cost bond funding.

14.1.2. Fixed Charge Coverage

In addition to revenue bond debt service coverage, Metropolitan also measures total coverage of all fixed obligations after payment of operating expenditures. This additional measure is used primarily because of Metropolitan's recurring capital costs for the State Water Contract. Rating agencies expect that a financially sound utility consistently demonstrate an ability to fund all recurring costs, whether they are operating expenditures, debt service payments or other contractual payments. The LRFPP forecasts that Metropolitan's fixed charge coverage ratio ranges from a low of 1.3 times to a high of 1.4 times over the ten-year period. These levels help maintain strong credit ratings and access to the capital markets at low cost.

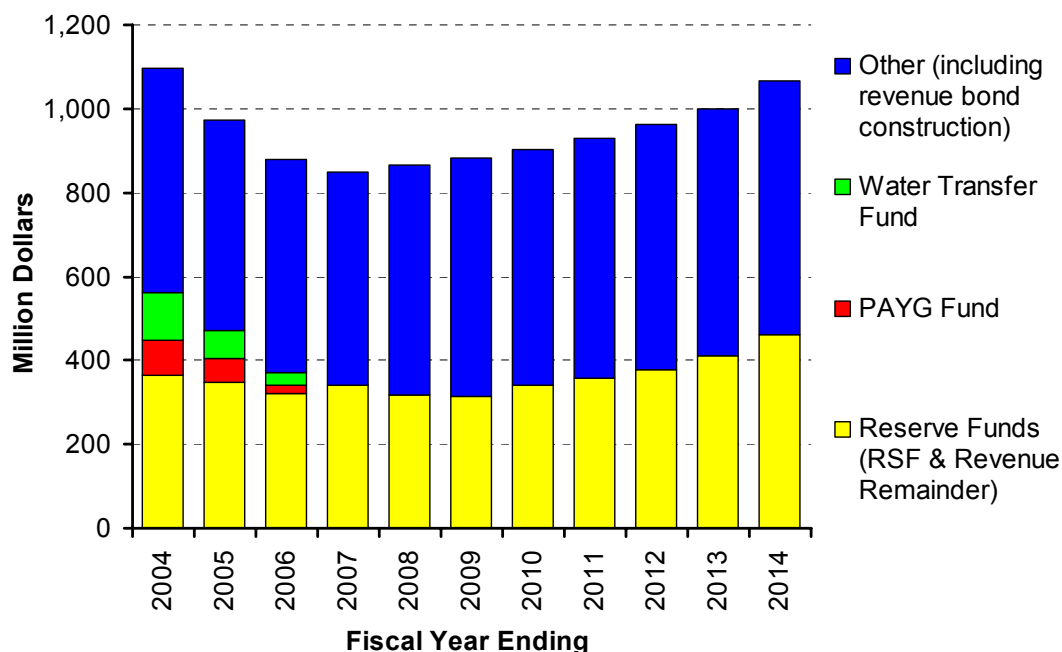
14.2. Fund Levels

Metropolitan's fund policies are formulated to meet requirements as set forth in bond covenants and by the Board. Most importantly, the reserve fund policies provide Metropolitan with the ability to meet anticipated cash flow

requirements and mitigate unanticipated cost increases or revenue decreases, helping to ensure that rates and charges are predictable. Minimum and maximum reserve targets govern the water rate stabilization fund balance. The minimum and maximum reserve targets are determined by a formula developed in the 1999 Plan, after significant input from member agencies. The formula takes into account the variability in water sales, the amount of fixed costs recovered by volumetric rates and the duration of a period of low sales. As reserves decrease below the maximum reserve target Metropolitan's ability to mitigate for unforeseen cost increases or decreases in water sales caused by wet weather is reduced.

The LRFP anticipates using \$50 million of rate stabilization reserves by 2007/08 to mitigate rate increases. Figure 17 illustrates the expected trend in fund balances, including the initial use of rate stabilization funds to mitigate rate increases, the use of remaining water transfer fund balances and necessary changes in required fund balances (e.g. debt service reserve funds) as fixed costs continue to increase. If water sales and revenues are lower than expected and/or costs are higher draws on reserves could be greater. Conversely, higher sales and lower costs will result in higher than expected reserve balances.

Figure 17. Fund Balances



ATTACHMENT 2



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

March 23, 2018

VIA EMAIL AND U.S. MAIL

Mark J. Hattam, General Counsel
San Diego County Water Authority
4677 Overland Avenue
San Diego, California 92123

Re: Your letter dated March 11, 2018 regarding March 12 F&I Committee/Budget and Rates Workshop #3, and March 13, 2018 Board Meeting Agenda Item 4 Public Hearings

Dear Mr. Hattam:

This letter addresses your comments, received via email on Sunday, March 11, 2018, at 10:31 p.m. (attached), making a formal request for records and providing “high level comments and questions” on Board Letters 8-1 and 9-2, both dated February 13, 2018. These Board Letters set a combined public hearing and provided information regarding proposals regarding Metropolitan’s Ad Valorem property tax rate, biennial budget, rates, and charges. On March 21, 2018, Metropolitan General Counsel Marcia L. Scully responded to your request for records. In this letter, the General Manager and General Counsel’s offices respond to your comments and questions, as they raise a number of financial and legal issues. We provide responses to the comments and questions in the same order listed in your March 11, 2018 letter.

I. “The Budget Document lacks sufficient detail to track past or proposed expenditures, or determine how MWD has allocated its costs to arrive at the proposed rates and charges”

Your request that staff provide “projected actual expenditures by line item and category as part of the budget and rate setting process,” is unclear. (See, 3/11/18 Ltr, p. 1.) We do not know what you mean by “projected actual expenditures,” as a budget is a forward-looking document that reasonably estimates expenditures in upcoming years. The purpose of a budget is to project the expenditures the agency reasonably expects to incur in the future budget period and Metropolitan distributed its proposed Biennial Budget for FY 2018/19 and FY 2019/20 on February 1, 2018. Thus, Metropolitan has already provided its projected expenditures for the next biennium period.

Mr. Mark J. Hattam

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March 23, 2018

You further request such “projected actual expenditures by line item and category” and state that it is “standard industry practice in budgeting and rate setting for public utilities” to provide this information. (See, 3/1//18 Ltr, p.1.) Metropolitan has provided its projected expenditures by line item and category in its proposed Biennial Budget, which contains:

- a) a budget summary, broken down by appropriations, funds, source of funds, operating revenue, capital funding, uses of funds, operations and maintenance (by organization and by expenditure type), capital investment fund, and fund balance and reserves, with each category further broken down for reference;
- b) a departmental/group budget, breaking down each department’s operations and maintenance (“O&M”) by expenditure section, and providing personnel summaries;
- c) an operating equipment budget;
- d) a nondepartmental budget for each of Metropolitan’s major cost categories: the State Water Project, CRA Power, Supply Programs, Demand Management, and Capital Financing; and
- e) a breakdown by category of costs for each nondepartmental budget.¹

Concurrently, Metropolitan also provided its 2018 Cost of Service Report, which explains Metropolitan’s allocation of the specific costs in the proposed Biennial Budget. The 2018 Cost of Service Report also contains an appendix with 159 pages of Cost of Service Tables. Such tables show costs by line item for departmental and nondepartmental costs and assign each line item to a cost function by percentage.²

On March 7, 2018, Metropolitan also provided its 185-page Capital Investment Plan (“CIP”) Appendix to the Biennial Budget. The CIP Appendix lists over 300 projects and a total project estimate for each project.³

¹ Metropolitan’s proposed Biennial Budget is available at:

<http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>.

² Metropolitan’s 2018 Cost of Service Report is available at:

<http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>.

³ Metropolitan’s CIP Appendix is available at:

<http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>.

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In addition, based on requests for data and other materials used to generate or supporting Metropolitan's proposed rates and charges, Metropolitan also provided further line item detail that form the bases of Metropolitan's Biennial Budget, which are available at:

<http://www.mwdh2o.com/WhoWeAre/Management/Financial-Information/Pages/2018-Underlying-Materials.aspx>.

Therefore, we do not know which "line item and category" you believe is missing from the information Metropolitan publishes in connection with its budget and rates process. Metropolitan meets industry standards and your letter does not identify the "standard industry practice" you claim Metropolitan fails to meet.

To the extent the detailed line-item information Metropolitan has provided is not the line-item detail you seek, please provide us with an example of the specific line-item budget that you find acceptable. We have reviewed SDCWA's proposed budget, for example, and do not find it provides more detailed budget information than does Metropolitan's Budget and the additional materials Metropolitan publishes.

II. "MWD's Cost of Service methodology is flawed because it fails to analyze cost causation or account for or assign costs by customer class"

You claim that Metropolitan's cost of service methodology is "obviously flawed" because Metropolitan only has one customer class and therefore purportedly fails "to analyze or account for the varying demands and service characteristics of its 26 member agencies." (3/1//18 Ltr., p. 2.) However, Metropolitan's rate structure does analyze and account for the varying demands by, and characteristics of the service to, its member agencies.

Metropolitan's unbundled rates and charges are designed to provide transparency regarding the cost of specific functions to member agencies (functional costs are recovered through appropriate rate elements), thereby ensuring that the member agencies pay only for the services they elect to receive. We have explained this in the Metropolitan Cost of Service Report, at pages 88-89, and also in the prior Cost of Service Report and letters. For example, please see the April 12, 2016 letter from Raftelis Financial Consultants, Inc. to Gary M. Breaux, which we provided to SDCWA. There, Mr. Rick Giardina⁴ explains that the AWWA M-1 Manual, which focuses on retail utilities, references classes of customers. However, he further explains that the manual

⁴ Mr. Giardina has over 39 years of utility finance and cost of service experience. More recently he served as the Vice Chair of the AWWA Rates and Charges Committee and in that capacity he was the Chair of the working group that produced the Sixth Edition of the M1 (published in 2012). He was also Chair of the Rates and Charges Committee and oversaw the preparation of the Seventh Edition of the M1 which was published in 2017. His resume was included as Attachment A to the April 12, 2016 letter.

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itself is clear that the classification of customers is not a requirement for any utility and may not apply to a wholesale utility such as Metropolitan. (RFC 4/12/16 Ltr, pp. 2-3.)

Indeed, we note that in SDCWA's Cost of Service Study, dated May 2017, Carollo Engineers, SDCWA's rate consultant, explains that classes of customers are not required for SDCWA, a wholesale water service provider with an unbundled rate structure. Carollo explains at pages 2-3 of its Study that SDCWA has an unbundled rate structure based on functional cost allocation, and not classes of customers. Carollo further explains that SDCWA's customer service and storage charges are "designed to account for annual fluctuations in water demands and demand patterns." And, those charges are set based on multi-year rolling averages of each of SDCWA's member agencies. (2017 SDCWA Cost of Service Study, pp. 26-27.) Additionally, Carollo explains at page 7 that although SDCWA's Act allows the Board to "establish reasonable classifications among different classes of customers," its General Counsel has advised that such language requires only "that rates be non-discriminatory and that differences in rates or rate apportionment be based on service differences." (Id. at 7.) As you know, Metropolitan also recovers costs based on functional cost allocation and also bases certain charges on multi-year rolling averages to account for annual fluctuations in water demands among its agencies. Thus, we do not understand your position that doing so is flawed, in light of your own practice.

III. "Request for public records under California Public Records Act (Gov. Code § 6250 et seq.)"

On March 21, 2018, Metropolitan General Counsel Marcia L. Scully responded to your request for records pursuant to the California Public Records Act (attached).

IV. "Written Request for Notice (Gov. Code §54999.7(d); Request for Data and Proposed Methodology for Establishing Rates and Charges (Gov. Code § 54999.7(e))"

On March 21, 2018, Metropolitan General Counsel Marcia L. Scully responded to your request for records pursuant to Government Code Section 54999.7 (attached). Although Ms. Scully explains therein Metropolitan's position that Government Code Section 54999.7 does not apply to Metropolitan's rates and charges, Ms. Scully directed SDCWA to records previously provided by Metropolitan to the Board of Directors and to the public and available on its website.⁵

In connection with this request, you also claim that Metropolitan has only produced a summary of information in the materials it provided in advance of its first Budget, Rates, and Charges

⁵ Your letter also included a written request for notice under California Government Code Section 54999.7(d). Aside from the inapplicability of Section 54999.7(d), SDCWA made this request for notice of a public meeting concerning rates or charges after Metropolitan had already provided such notice to the Board and public, so the request is moot.

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Workshop. (3/11/18 Ltr, pp. 2-3.) However, as explained in this letter, Metropolitan has provided detailed information regarding its budget and cost allocation methodology. In addition, Metropolitan has held three workshops in which staff made presentations further explaining the extensive material provided and answered questions directly from Metropolitan directors. Metropolitan's staff also holds monthly Member Agency Managers meetings with staff from each of its member agencies. SDCWA staff, like staff from any other agency, has the opportunity to discuss with Metropolitan staff matters pending before the Metropolitan Board.

V. "There is no demonstrated justification for suspension of the ad valorem tax rate limitation"

You claim that the proposal to suspend the limitation in Section 124.5 to permit Metropolitan to continue to maintain the current ad valorem ("AV") property tax rate is not supported by data and is flawed. (3/1//18 Ltr., pp. 3-4.) We direct you to the data supporting the recommendation to continue the suspension, which is available at <http://www.mwdh2o.com/WhoWeAre/Pages/FYs-2018-19-2019-20-proposed-property-tax-rates.aspx>. Additionally, we address herein your claim that the recommendation is flawed, which appears to be based on two points.

First, you state that a greater portion of Metropolitan's State Water Contract ("SWC") costs should be recovered from rates and charges than from AV property taxes. They are. Metropolitan's proposed Biennial Budget for FY 2018/19 and FY 2019/20 includes \$566.7 million and \$602.5 million, respectively, for SWC costs. (See, proposed Biennial Budget, p. 8.) The proposal to suspend the property tax limitation of Section 124.5 to continue the AV tax at .0035 percent of assessed valuations would permit Metropolitan to collect \$89.2 million in FY 2018/19 and \$93.4 million in FY 2019/20 from AV property taxes over the 124.5 limitation to offset SWC costs. (See, id. at p. 6; see also, 3/13/18 Presentation, Slide 8.) Thus, the proposal to continue to suspend the Section 124.5 limitation would allow for the collection of about 17 to 18 percent of Metropolitan's SWC costs in each fiscal year. The remaining approximately 82 to 83 percent of SWC costs would continue to be recovered directly from Metropolitan's member agencies through rates and charges.

Your suggestion that the AV property taxes and the Readiness-to-Serve ("RTS") charge are interchangeable ignores that under Metropolitan's cost allocation methodology, costs must be recovered pursuant to their functionalization. A reduction in AV tax revenue does not result in an equivalent increase in the RTS charge. However, if SDCWA believes these costs should be borne directly by the member agency and not by property owners within its service area, SDCWA may elect to pay that obligation. Metropolitan's Act, at Section 336, provides that any member agency "may elect to pay out of the agency funds of such agency, other than funds derived from ad valorem property taxes, all or the stated percentage, as the case may be, of the amount of tax which would otherwise be levied upon property within such agency." (Metropolitan Water District Act, § 336.)

Mr. Mark J. Hattam

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Second, you rely on erroneous information regarding the SWC costs in Metropolitan's Biennial Budget. SWC costs are lower in FY 2018/19 due to global cost reductions achieved by Water Resource Management staff and other State Water Contractors working with the Department of Water Resources. These reductions affect both the Delta Water Charge and the Transportation Charge capital and Operations, Maintenance, Power and Recovery (OMP&R). SWC costs then increase from this lower base beginning in FY 2019/20 and continuing throughout the ten-year forecast.

VI. "The purported PAYGo Funding policy and 'Resolution for Reimbursement' would allow revenues to be collected for one purpose but used for another without any consideration of or adjustment for cost of service requirements"

Your objection to the PAYGo policy and resolutions of reimbursement is misplaced. The objection is based on the premise that the determination of whether to use cash or debt is a cost allocation issue. It is not.

Moreover, Metropolitan uses debt proceeds for its capital expenses, whether it is to pay concurrent expenses or through reimbursement of expenses previously funded by cash.

Finally, it appears you are suggesting that it is not the Board that makes the decision as to a resolution of reimbursement. As stated in Metropolitan's February 13, 2018 Information Board Letter, at page 5, the resolution "will be provided to the Board for consideration and approval."

VII. "Demand that MWD set aside principal and prejudgment interest at 10% for the WSR Exchange Agreement overcharges consistent with Court of Appeal decision"

As you know, Metropolitan sets aside the exchange agreement payments that SDCWA disputes, and interest thereon, pursuant to Section 12.4(c) of the exchange agreement. Section 12.4(c) requires that Metropolitan set aside disputed amounts in an interest bearing account and that the prevailing party pay "all interest earned thereon" upon resolution of the dispute. That is what Metropolitan has done. Metropolitan has no separate statutory obligation to set aside statutory prejudgment interest in advance of a judgment. And as you know, the Court of Appeal's decision as to prejudgment interest addresses the interest rate that applies to any award of damages in that case, not to the amount Metropolitan must set aside pursuant to the contractual provision. (*See, SDCWA v. Metropolitan* (2017) 12 Cal.App.5th 1124, 1154-55.)

VIII. "Demand that MWD not impose its Water Stewardship Rate on any wheeled water"

Metropolitan does not "impose" its rates on its voluntary cooperative of member agencies. Pursuant to state statute, the Board, made up of each of those agencies' representatives, sets the rates applicable to the services Metropolitan provides to those same agencies. The Board will

Mr. Mark J. Hattam

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decide on April 10, 2018 whether to adopt the proposed rates and charges, which continue to properly include the Water Stewardship Rate.

As you know, the Court of Appeal held that the “record [before it] fail[ed] to support Metropolitan’s inclusion of the water stewardship rate as a transportation cost” for the years at issue, which were 2011-2014. (*SDCWA v. Metropolitan*, 12 Cal.App.5th at 1150.) And it confirmed that “the narrow question [in that appeal] is whether substantial evidence supports Metropolitan’s determination.” (*Id.* at 1151.) Thus, Metropolitan’s adoption of rates, including its Water Stewardship Rate, does not violate the Court of Appeal’s decision. Metropolitan’s proposed rates and charges are based on the administrative record before the Board at the time it adopts the rates and charges for the new biennium period.

IX. “Request for calculation of offsetting benefits under the Wheeling Statute”

The parties obviously disagree as to the interpretation of the Court of Appeal’s decision regarding the applicability of Water Code Section 1810, *et seq.* But what is clear is that the Court of Appeal decision does not address whether Metropolitan “must calculate the offsetting benefits of the Water Authority’s Exchange Agreement” fifteen years after the effectiveness of that agreement, as you demand (*SDCWA v. Metropolitan*, 12 Cal.App.5th 1124) and this has not been part of the parties’ litigation. Neither the Court of Appeal decision, nor any other law, requires that Metropolitan calculate any alleged “offsetting benefits.”

Based on the foregoing, Metropolitan has responded to the “high level comments and questions” in your March 11, 2018 letter. Should you have any further questions, please feel free to contact either of the undersigned.

Sincerely,



Gary Breau
Assistant General Manager
Chief Financial Officer



Marcia Scully
General Counsel

cc: Metropolitan Board of Directors
SDCWA Board of Directors
Jeffrey Kightlinger, Metropolitan General Manager
Maureen Stapleton, SDCWA General Manager

Mr. Mark J. Hattam

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Attachments:

Letter dated March 11, 2018 regarding March 12 F&I Committee/Budget and Rates Workshop #3, and March 13, 2018 Board Meeting Agenda Item 4 Public Hearings

Letter dated March 21, 2018 re Response to Public Records Act Request dated March 11, 2018 and Response to Request for Data and Proposed Methodology dated March 11, 2018

the final Budget Document.

II. MWD's Cost of Service methodology is flawed because it fails to analyze cost causation or account for or assign costs by customer class

Separate and apart from the fact that it is not possible to replicate how MWD has assigned its costs to rates without access to its rate model, the underlying methodology is obviously flawed due to MWD's failure to analyze or account for the varying demands and service characteristics of its 26 member agencies, which MWD admits exist. One of the basic principles of cost of service and ratemaking is to group customers with similar demand and usage patterns in common categories (classes), so that costs may be assigned to the customer classes that cause these costs to be incurred. In spite of the different service patterns and use characteristics of MWD's member agencies, MWD has simply declared by legislative fiat that it has only one customer class.

Historically, MWD has claimed that Proposition 26 and cost of service requirements do not apply to its rates, and that the only test is one of "reasonableness." Although the Court of Appeal in the 2010/2012 Rate Case clearly applied Proposition 26, MWD persists in insisting that Proposition 26 and cost of service requirements do not apply to MWD's rates.¹

III. Request for public records under California Public Records Act (Gov. Code § 6250 *et seq.*)

As you know, the Water Authority is seeking public disclosure of the rate model MWD uses to allocate costs and set its rates and charges. We filed a Public Records Act (PRA) request on February 18, 2016 (Attachment 1), requesting disclosure of the 2016 rate model and various data, analyses and studies as described in paragraphs 1-8 of that letter. We hereby make formal demand for the 2018 rate model and all supporting data as described in paragraphs 1-8 and any other "input" MWD relied on to establish the 2018 proposed rates and charges for calendar years 2019 and 2020. We also request:

1. A copy of the "Financial Planning Model Manual" Mr. Van den Berg identified and described during his deposition on May 11, 2017 (at pages 69-72).
2. A functional copy of the 2018 Budget Document as it is maintained in the ordinary course of business, in which the links are not disabled.

IV. Written Request for Notice (Gov. Code §54999.7(d); Request for Data and Proposed Methodology for Establishing Rates and Charges (Gov. Code § 54999.7(e))

The Water Authority hereby makes formal request to be provided with all of the data and proposed methodology MWD will rely upon for establishing rates, charges and surcharges or fees for 2019 and 2020 in accordance with the above-listed Government Code provisions. The Water Authority and its MWD board delegates have previously requested this information but thus far none has been provided except as contained in the Budget Document.

With only one month remaining before the MWD board votes on the proposed rates and charges, not all of the underlying data "input" has been provided to MWD's member agencies or the public except in the summary form contained in the Budget Document. Obviously, not all information has been made available prior to the public hearing on March 13, 2018. Given MWD's assertions about the complexity of its ratemaking process, with a rate model that purportedly consists of more than 350,000 mathematical formulas, links and calculations, MWD's failure to provide the requested information is wholly unacceptable and contrary to law.

V. There is no demonstrated justification for suspension of the ad valorem tax rate limitation

As expressed by the Water Authority on many prior occasions, Section 124.5 of the MWD Act allows the board to suspend the tax limitation, but only after it finds that the suspension is "essential to the fiscal integrity of the district." The purported reason for the proposed suspension in 2019 and 2020 is to "pay for growing State Water Contract costs" and to "help maintain a balance between fixed and variable revenues, and reduce the impact of future water rate increases." However, this justification is not supported by data and is flawed.

First, the proposed tax rate suspension—in order to "reduce the impact of future water rate increases—is contrary to the legislative history of Section 124.5, which expressed the intent that taxes be reduced and that user rates and charges constitute the great preponderance of MWD's revenues. A greater reliance on rates over taxes also better allows costs to be assigned to the customer groups that cause specific costs to be incurred.

While MWD's objective of maintaining a balance between fixed and variable revenues is certainly proper, reducing the very charges the Legislature provided to MWD to be used in lieu of property taxes is inconsistent with that objective. The proposed suspension of the tax rate will increase MWD's tax revenues by 16 percent between 2018 and 2019, but the readiness-to-serve (RTS) charge is proposed to decrease by 5 percent during the same period. In fact, the pattern of *decreasing* RTS and *increasing* tax revenues carries forward in the proposed financial forecast.

When comparing the financial forecast proposed in this budget and the one adopted in 2016, MWD is projecting a higher tax revenue trend (staff is apparently planning to continue the tax rate limitation suspension indefinitely), and a lower RTS collection during the same period. As an example, in 2026, the projected RTS collection would be 15 percent lower than that projected for the same year in the 2016 biennial budget, while the projected tax revenues for the same year (2026) is 5.5 percent higher than previously forecasted.

Finally, MWD staff reported that State Water Contract (SWC) costs are projected to be reduced from what was previously forecast due to delayed implementation of WaterFix and MWD's staff's successful negotiation with Department of Water Resources to reduce future expenditures. Since

these costs are less than the fiscal year 2018 budgeted SWC costs (and the SWC costs forecasted in the adopted financial forecast for fiscal year 2019), staff's justification for the tax rate limitation suspension -- because it purportedly is needed to cover "growing" SWC costs -- is baseless.

VI. The purported PAYGo Funding policy and "Resolution for Reimbursement" would allow revenues to be collected for one purpose but used for another without any consideration of or adjustment for cost of service requirements

The Water Authority strongly opposes the so-called "Resolution for Reimbursement." MWD apparently plans to use PAYGo revenues as a discretionary fund, by adopting a "Resolution for Reimbursement" to allow the use of revenues from PAYGo to pay for operations expenses, before a need is even identified. This resolution would authorize staff to prospectively collect \$120 million annually for one purpose (CIP) but then potentially use it for another purpose (O&M or California WaterFix). This is not only an unsound fiscal strategy lacking in transparency, but it also deliberately avoids any accountability ("true up") or tie to cost of service. The board should make a decision now on whether to raise rates, plan to borrow money or, notably, reduce costs rather than engage in the gimmick of the proposed Resolution.

VII. Demand that MWD set aside principal and prejudgment interest at 10% for the WSR Exchange Agreement overcharges consistent with Court of Appeal decision

In February Board Memo 9-1, the following is stated on page 5:

"Metropolitan holds \$52.8 million in its financial reserves in accordance with the set-aside provision of the 2003 Amended and Restated Exchange Agreement between Metropolitan and SDCWA (exchange agreement). This amount includes \$51 million associated with exchange agreement water deliveries from January 2011 through October 2017 and \$1.8 million in accumulated interest earned thereon, based on Metropolitan's investment portfolio."

We believe this set-aside is too low, and not in compliance with the Court of Appeal's decision, where the Court stated, on pages 1155-56 of its decision:

"Metropolitan contends the statutory rate of interest was wrongly used in the original proceedings because the exchange agreement stipulates a contractual rate. This contention is unsupported by the terms of the exchange agreement, as the trial court rightly held."

MWD is well aware that the prejudgment interest rate found by the trial court is 10 percent, not the rate "based on Metropolitan's investment portfolio." Our calculations show that the actual amount that should be reserved by MWD through 2018 is approximately \$87 million, which includes both principal and prejudgment interest – leaving about a \$34 million deficit in what MWD is now actually

withholding and reporting to the Board. If MWD's Board approves not charging the Water Stewardship Rate (WSR) to the Exchange Agreement water through the rest of 2018, that total will of course drop slightly. Demand is hereby made by the Water Authority that MWD properly set aside all principal and prejudgment interest at 10% for the WSR Exchange Agreement overcharges through 2018, or any earlier date the MWD board may end the overcharges in 2018.

VIII. Demand that MWD not impose its Water Stewardship Rate on any wheeled water

In February Board memo 9-1, MWD seeks approval by its Board to suspend imposition of WSR charges on Exchange Agreement water, while still imposing them on other wheeling transactions. For example, see page 5 of February Board memo 9-1, which states that the reduction applies only to Exchange Agreement water, with no mention of other wheeled water:

"[I]t is proposed that the Water Stewardship Rate will not be billed on the exchange agreement deliveries for CYs 2019 and 2020, with Metropolitan foregoing any collection of these amounts during this study period. Further, it is recommended that Metropolitan suspend billing and collecting the current Water Stewardship Rate on exchange agreement deliveries in CY 2018."

See also page 102 of Attachment 3 to the above document, which makes clear wheeled water would be assessed WSR charges (emphasis added): "All system users (member agency or third parties) will pay the same proportional costs for existing and future conservation and recycling investments."

However, the Court of Appeal's ruling was based on the Wheeling Law (Water Code sections 1810 *et seq.*), and the Court found that under that law MWD cannot charge the WSR on wheeled water: "A water agency's payments to its members to encourage water conservation is outside the scope of recoverable costs contemplated by the wheeling statutes." *Id.* at 1150.

MWD's decision to impose WSR charges on wheeled water is in clear violation of the Court of Appeal's decision, and thus unlawful. Though we appreciate the fact that MWD staff recommends not making unlawful charges against the Exchange Agreement, it is clear that MWD may not impose the same unlawful charges to all other wheeling transactions. Demand is hereby made by the Water Authority that MWD not adopt rates that allow for WSR charges to be assessed against wheeled water.

IX. Request for calculation of offsetting benefits under the Wheeling Statute

As you are aware, the Court of Appeal determined that the Wheeling Statutes apply to the Exchange Agreement between MWD and the Water Authority. Accordingly, under Water Code § 1811(c), and consistent with MWD Board Resolution 8520, MWD must calculate the offsetting benefits of the Water Authority's Exchange Agreement water. Because MWD's wheeling rate, and the Water Authority's price under the Exchange Agreement, is calculated in part based on the setting of MWD's

annual rates, MWD should perform this calculation now as part of this budget and rate-setting cycle, so that these costs may properly be reflected in MWD's budget, and long term planning and disclosure documents. The Water Authority identified this issue to MWD last November as a litigation issue remaining to be resolved between MWD and the Water Authority, but as you are aware, the MWD and Water Authority negotiating teams have not yet met.

X. Conclusion

Our MWD board representatives have additional policy questions and comments that will be presented separately.

Sincerely,



Mark J. Hattam
General Counsel

Attachment: Water Authority's Public Records Act request for MWD rate model, dated February 18, 2016

cc: MWD Board of Directors
Water Authority Board of Directors
Maureen Stapleton, General Manager

ⁱ Contrary to a recent public statement by one of Metropolitan's attorneys, the Court of Appeal did in fact apply Proposition 26 to Metropolitan's rates.

Ms. Dawn Chin
February 18, 2016
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- Printed matter (including published articles, speeches, newspaper clippings, press releases, and photographs); and
- Microfilm and microfiche, disks, computer files, electronically stored data (including the metadata associated with any such written and/or spoken content), electronically stored information, electronic devices, film, tapes, and other sources from which information can be obtained, including materials used in electronic data processing. "Electronic" means relating to technology having electrical, digital, magnetic, wireless, optical, electromagnetic, or similar capabilities. "Electronically stored information" means information that is stored in an electronic medium, including data, metadata, and all electronically stored data or information.

The term "related to," as used in each category of public record listed below, means directly or indirectly, in whole or in part, comprising, referring to, concerning, evidencing, connected with, commenting on, affecting, responding to, showing, describing, discussing, analyzing, reflecting or constituting.

The term "rate model," as used in each category of public record listed below, means all documents, data, analyses, calculations, studies or other information that constitute, comprise, support or describe the manner in which MWD assigns costs to rates, including but not limited to its "financial planning model," including the spreadsheet, formulas and programming code.

If a record responsive to a request was, but no longer is, in your possession, custody, or control, state precisely what disposition was made of it (including its present location and who possesses or controls it) and identify the person(s) who authorized or ordered such disposition.

Records produced in response to this request should be produced as they are kept in the usual course of business or should be organized and labeled to correspond with the categories in the request. All electronically stored information shall be produced in its native format with all metadata intact.

The requested records are:

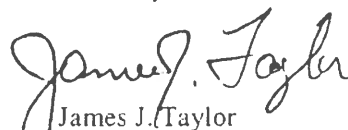
1. Any rate model or models used in formulating proposed rates for the 2017 and 2018 calendar years.
2. All data, analyses and studies, if any, and cost of service analysis used to generate or supporting the rates and charges proposed for the 2017 and 2018 calendar years, as described in MWD Board Memo 9-2 dated 2/9/2016 (Finance and Insurance Committee).
3. All data, analyses and studies, if any, and cost of service analysis used to generate or supporting a proposed reduction of the Readiness-to-Serve and Capacity Charges for 2017.
4. All data, analyses and studies, if any, demonstrating the proportionate benefit each of MWD's 26 customer member agencies will receive from the expenditure of revenues collected from the rates and charges proposed for the 2017 and 2018 calendar years.
5. All data, analyses and studies, if any, that support the conclusion that demand management programs provide distribution and conveyance system benefits, including identification of those parts of the distribution and conveyance system where additional capacity is needed and the customer member agencies that benefit from that capacity being made available.

Ms. Dawn Chin
February 18, 2016
Page 3

6. All data, analyses, opinions and studies, if any, that support the conclusion that suspension of the property tax restriction in Section 124.5 of the MWD Act is essential to MWD's fiscal integrity, as described in MWD Board Memo 9-2 at page 3.
7. All data, analyses and studies, if any, supporting the findings, conclusions, recommendations and water supply development targets identified in MWD's 2015 IRP Technical Update Issue Paper Addendum.
8. All data, analyses and studies, if any, supporting the findings, conclusions, recommendations and water supply development targets identified in MWD's Integrated Water Resources Plan 2015 Update.

Within ten (10) days of receipt of this PRA request, please contact me at (858) 522-6791 to discuss whether MWD has records responsive to this request, the page count and cost of copying the records, and whether the documents are also available in electronic format.

Sincerely,


James J. Taylor
Acting General Counsel

cc: MWD Public Records Administrator (by email at pradministrator@mwdofmsa.com)



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Counsel

March 21, 2018

VIA EMAIL AND FEDERAL EXPRESS

Mark J. Hattam
General Counsel
San Diego County Water Authority
4677 Overland Avenue
San Diego, California 92123-1233

Re: Response to Public Records Act Request Dated March 11, 2018
Response to Request for Data and Proposed Methodology Dated March 11, 2018

Dear Mr. Hattam:

We received your letter dated Sunday, March 11, 2018, which was sent to Metropolitan Board of Directors Chairman Randy Record and the Metropolitan Board of Directors via email at 10:31 p.m. on that date, which among other things contains a Public Records Act (“PRA”) request in section III (“2018 request”) and a request for data and proposed methodology in section IV. A copy of your request is attached.

Public Records Act Request

This response is made in compliance with California Government Code Section 6253(c), which requires an agency to notify a person making a request within 10 days whether a request seeks disclosable records. We have determined that your request seeks disclosable records, with the exception of Metropolitan’s financial planning model, which is exempt from disclosure under Government Code Section 6254.9(a) as a proprietary computer software program developed by Metropolitan that contains nondisclosable formulas and programming code. The model is also not subject to disclosure under Government Code Section 6254(k), Evidence Code Section 1060, and Civil Code Section 3426.1 as confidential, proprietary material that derives independent economic value from not being generally known. The model is further not subject to disclosure under Government Code Section 6255(a) because the public interest in preserving its confidentiality clearly outweighs any asserted public interest in disclosure.¹

¹ SDCWA already received the financial planning model through the *SDCWA v. Metropolitan* rate litigation, subject to the parameters and restrictions of the Court’s protective order, so SDCWA has had full opportunity to view it and understand its operations.

Mr. Mark J. Hattam

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March 21, 2018

Metropolitan will provide disclosable records as explained below, to the extent they: (1) are not already posted on Metropolitan's website at www.mwdh20.com, (2) have not already been provided to the Metropolitan Board of Directors, and/or (3) have not already been provided to SDCWA in response to its prior PRA requests or in connection with the *SDCWA v. Metropolitan* litigation.

Your 2018 request incorporates paragraphs 1-8 of an attached letter dated February 18, 2016 ("2016 request") in which the San Diego County Water Authority ("SDCWA") made previous requests under the PRA. Paragraphs 7 and 8 of the 2016 request concerned records pertaining to Metropolitan's 2015 IRP Technical Update Issue Paper Addendum and IRP 2015 Update. Metropolitan previously responded to those requests in 2016.

Paragraphs 1-6 of the 2016 request concerned records pertaining to the budget, rates, and charges proposed in 2016, and Metropolitan also previously responded to those requests in 2016. We have assumed you intended Metropolitan to interpret the 2018 request's reference to paragraphs 1-6 to include modifications to concern records pertaining to the fiscal years 2018/19 and 2019/20 proposed budget and calendar years 2019 and 2020 proposed rates and charges, and so we have done so. The 2018 request further asks for "any other 'input' MWD relied on to establish the 2018 proposed rates and charges for calendar years 2019 and 2020." We interpret this additional language as referring to "any other input into the financial planning model that MWD relied on to establish the 2018 proposed rates and charges for calendar years 2019 and 2020." The requested records have already been posted on Metropolitan's website for public review between February 1 and March 14, 2018 at the following locations:

- <http://www.mwdh20.com/WhoWeAre/Pages/proposed-budget-rates.aspx>
- <http://www.mwdh20.com/WhoWeAre/proposed-property-tax-rates>

Of these records, some of the file names at the following location, posted since March 8, 2018, were modified to accommodate the naming conventions required by Metropolitan's website:

- <http://www.mwdh20.com/WhoWeAre/Management/Financial-Information/Pages/2018-Underlying-Materials.aspx>

The identical records, but with the original file names, will be provided to you on a disc. For example, the files from the "Biennial Budget Reports\Labor Distribution by Org Report\Proposed plus 1" folder on the disc were renamed on the website by adding the prefix 'PP1' to each of the files posted on the website. In the posting and on the disc, proprietary formulas and programming code have been removed from spreadsheets, and employee-specific information has been redacted.

Additionally, your 2018 request asks for "a functional copy of the 2018 Budget Document." Metropolitan interprets this request as referring to the proposed Biennial Budget for Fiscal Years 2018/19 and 2019/20, which was provided to Metropolitan's Board of Directors, including the

Mr. Mark J. Hattam

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March 21, 2018

SDCWA delegates, on February 1, 2018, and has been posted for public review on Metropolitan's website since that date at the following location:

- <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>

There is no such record as a "functional copy" of that document.

Finally, your 2018 request asks for the "Financial Planning Model Manual Mr. Van den Berg identified and described during his deposition on May 11, 2017." This will be provided with redaction of the confidential log-in information to the model pursuant to Government Code Section 6255(a), because the public interest in preserving its confidentiality clearly outweighs any asserted public interest in disclosure.

Enclosed is a disc containing the above-described disclosable Metropolitan records provided in response to your PRA request, except as previously posted or provided. Because Metropolitan's budget-setting and rate-setting process is still in progress, the disc contains materials through the Public Hearings held on March 13, 2018.

Response to Request for Data and Proposed Methodology

Your request for data and proposed methodology was made under California Government Code Section 54999.7(e). As Metropolitan has explained in detail in the *SDCWA v. Metropolitan* litigation, and as SDCWA previously agreed, Section 54999.7(e) does not apply to Metropolitan. As you are aware, the California Court of Appeal did not decide the issue of Section 54999.7(e)'s application, finding instead that whether or not the statute is applicable, Metropolitan has complied with it. (*SDCWA v. Metropolitan* (2017) 12 Cal. App. 5th 1124, 1154 ["Whether or not the statute applies, it has not been violated."].) Metropolitan maintains that Section 54999.7(e) does not apply.²

Nonetheless, as part of its regular budget-setting and rate-setting process, Metropolitan provides to the Board, member agencies and the public the detailed data and proposed methodology for the proposed rates and charges, through the budget and rate Board letters, proposed budget, cost of service report, presentations and discussions at the multiple committee and Board meetings and workshops. Again, this material is posted on Metropolitan's website at the following locations:

- <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>
- <http://www.mwdh2o.com/WhoWeAre/proposed-property-tax-rates>

² Your letter also included a written request for notice under California Government Code Section 54999.7(d). Aside from the inapplicability of Section 54999.7(d), SDCWA made this request for notice of a public meeting concerning rates or charges after Metropolitan had already provided such notice to the Board and public, so the request is moot.

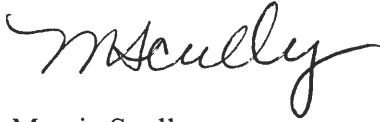
Mr. Mark J. Hattam

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As the staff continues to work on budget and rate matters in response to requests from the Board and direction from management until final adoption of the budget and rates, the webpages stated in this letter will continue to be updated.

Very truly yours,

A handwritten signature in black ink, appearing to read "MScully". The signature is written in a cursive, flowing style with a large initial "M" and a long, sweeping tail.

Marcia Scully
General Counsel

Enclosure: Disc (via Federal Express only)



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

March 23, 2018

VIA EMAIL AND U.S. MAIL

Mark J. Hattam, General Counsel
San Diego County Water Authority
4677 Overland Avenue
San Diego, California 92123

Re: Your letter dated March 11, 2018 regarding March 12 F&I Committee/Budget and Rates Workshop #3, and March 13, 2018 Board Meeting Agenda Item 4 Public Hearings

Dear Mr. Hattam:

This letter addresses your comments, received via email on Sunday, March 11, 2018, at 10:31 p.m. (attached), making a formal request for records and providing “high level comments and questions” on Board Letters 8-1 and 9-2, both dated February 13, 2018. These Board Letters set a combined public hearing and provided information regarding proposals regarding Metropolitan’s Ad Valorem property tax rate, biennial budget, rates, and charges. On March 21, 2018, Metropolitan General Counsel Marcia L. Scully responded to your request for records. In this letter, the General Manager and General Counsel’s offices respond to your comments and questions, as they raise a number of financial and legal issues. We provide responses to the comments and questions in the same order listed in your March 11, 2018 letter.

I. “The Budget Document lacks sufficient detail to track past or proposed expenditures, or determine how MWD has allocated its costs to arrive at the proposed rates and charges”

Your request that staff provide “projected actual expenditures by line item and category as part of the budget and rate setting process,” is unclear. (See, 3/11/18 Ltr, p. 1.) We do not know what you mean by “projected actual expenditures,” as a budget is a forward-looking document that reasonably estimates expenditures in upcoming years. The purpose of a budget is to project the expenditures the agency reasonably expects to incur in the future budget period and Metropolitan distributed its proposed Biennial Budget for FY 2018/19 and FY 2019/20 on February 1, 2018. Thus, Metropolitan has already provided its projected expenditures for the next biennium period.

Mr. Mark J. Hattam

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You further request such “projected actual expenditures by line item and category” and state that it is “standard industry practice in budgeting and rate setting for public utilities” to provide this information. (See, 3/1//18 Ltr, p.1.) Metropolitan has provided its projected expenditures by line item and category in its proposed Biennial Budget, which contains:

- a) a budget summary, broken down by appropriations, funds, source of funds, operating revenue, capital funding, uses of funds, operations and maintenance (by organization and by expenditure type), capital investment fund, and fund balance and reserves, with each category further broken down for reference;
- b) a departmental/group budget, breaking down each department’s operations and maintenance (“O&M”) by expenditure section, and providing personnel summaries;
- c) an operating equipment budget;
- d) a nondepartmental budget for each of Metropolitan’s major cost categories: the State Water Project, CRA Power, Supply Programs, Demand Management, and Capital Financing; and
- e) a breakdown by category of costs for each nondepartmental budget.¹

Concurrently, Metropolitan also provided its 2018 Cost of Service Report, which explains Metropolitan’s allocation of the specific costs in the proposed Biennial Budget. The 2018 Cost of Service Report also contains an appendix with 159 pages of Cost of Service Tables. Such tables show costs by line item for departmental and nondepartmental costs and assign each line item to a cost function by percentage.²

On March 7, 2018, Metropolitan also provided its 185-page Capital Investment Plan (“CIP”) Appendix to the Biennial Budget. The CIP Appendix lists over 300 projects and a total project estimate for each project.³

¹ Metropolitan’s proposed Biennial Budget is available at:

<http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>.

² Metropolitan’s 2018 Cost of Service Report is available at:

<http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>.

³ Metropolitan’s CIP Appendix is available at:

<http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>.

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In addition, based on requests for data and other materials used to generate or supporting Metropolitan's proposed rates and charges, Metropolitan also provided further line item detail that form the bases of Metropolitan's Biennial Budget, which are available at:

<http://www.mwdh2o.com/WhoWeAre/Management/Financial-Information/Pages/2018-Underlying-Materials.aspx>.

Therefore, we do not know which "line item and category" you believe is missing from the information Metropolitan publishes in connection with its budget and rates process.

Metropolitan meets industry standards and your letter does not identify the "standard industry practice" you claim Metropolitan fails to meet.

To the extent the detailed line-item information Metropolitan has provided is not the line-item detail you seek, please provide us with an example of the specific line-item budget that you find acceptable. We have reviewed SDCWA's proposed budget, for example, and do not find it provides more detailed budget information than does Metropolitan's Budget and the additional materials Metropolitan publishes.

II. "MWD's Cost of Service methodology is flawed because it fails to analyze cost causation or account for or assign costs by customer class"

You claim that Metropolitan's cost of service methodology is "obviously flawed" because Metropolitan only has one customer class and therefore purportedly fails "to analyze or account for the varying demands and service characteristics of its 26 member agencies." (3/1//18 Ltr., p. 2.) However, Metropolitan's rate structure does analyze and account for the varying demands by, and characteristics of the service to, its member agencies.

Metropolitan's unbundled rates and charges are designed to provide transparency regarding the cost of specific functions to member agencies (functional costs are recovered through appropriate rate elements), thereby ensuring that the member agencies pay only for the services they elect to receive. We have explained this in the Metropolitan Cost of Service Report, at pages 88-89, and also in the prior Cost of Service Report and letters. For example, please see the April 12, 2016 letter from Raftelis Financial Consultants, Inc. to Gary M. Breaux, which we provided to SDCWA. There, Mr. Rick Giardina⁴ explains that the AWWA M-1 Manual, which focuses on retail utilities, references classes of customers. However, he further explains that the manual

⁴ Mr. Giardina has over 39 years of utility finance and cost of service experience. More recently he served as the Vice Chair of the AWWA Rates and Charges Committee and in that capacity he was the Chair of the working group that produced the Sixth Edition of the M1 (published in 2012). He was also Chair of the Rates and Charges Committee and oversaw the preparation of the Seventh Edition of the M1 which was published in 2017. His resume was included as Attachment A to the April 12, 2016 letter.

Mr. Mark J. Hattam

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March 23, 2018

itself is clear that the classification of customers is not a requirement for any utility and may not apply to a wholesale utility such as Metropolitan. (RFC 4/12/16 Ltr, pp. 2-3.)

Indeed, we note that in SDCWA's Cost of Service Study, dated May 2017, Carollo Engineers, SDCWA's rate consultant, explains that classes of customers are not required for SDCWA, a wholesale water service provider with an unbundled rate structure. Carollo explains at pages 2-3 of its Study that SDCWA has an unbundled rate structure based on functional cost allocation, and not classes of customers. Carollo further explains that SDCWA's customer service and storage charges are "designed to account for annual fluctuations in water demands and demand patterns." And, those charges are set based on multi-year rolling averages of each of SDCWA's member agencies. (2017 SDCWA Cost of Service Study, pp. 26-27.) Additionally, Carollo explains at page 7 that although SDCWA's Act allows the Board to "establish reasonable classifications among different classes of customers," its General Counsel has advised that such language requires only "that rates be non-discriminatory and that differences in rates or rate apportionment be based on service differences." (Id. at 7.) As you know, Metropolitan also recovers costs based on functional cost allocation and also bases certain charges on multi-year rolling averages to account for annual fluctuations in water demands among its agencies. Thus, we do not understand your position that doing so is flawed, in light of your own practice.

III. "Request for public records under California Public Records Act (Gov. Code § 6250 et seq.)"

On March 21, 2018, Metropolitan General Counsel Marcia L. Scully responded to your request for records pursuant to the California Public Records Act (attached).

IV. "Written Request for Notice (Gov. Code §54999.7(d); Request for Data and Proposed Methodology for Establishing Rates and Charges (Gov. Code § 54999.7(e))"

On March 21, 2018, Metropolitan General Counsel Marcia L. Scully responded to your request for records pursuant to Government Code Section 54999.7 (attached). Although Ms. Scully explains therein Metropolitan's position that Government Code Section 54999.7 does not apply to Metropolitan's rates and charges, Ms. Scully directed SDCWA to records previously provided by Metropolitan to the Board of Directors and to the public and available on its website.⁵

In connection with this request, you also claim that Metropolitan has only produced a summary of information in the materials it provided in advance of its first Budget, Rates, and Charges

⁵ Your letter also included a written request for notice under California Government Code Section 54999.7(d). Aside from the inapplicability of Section 54999.7(d), SDCWA made this request for notice of a public meeting concerning rates or charges after Metropolitan had already provided such notice to the Board and public, so the request is moot.

Mr. Mark J. Hattam

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March 23, 2018

Workshop. (3/11/18 Ltr, pp. 2-3.) However, as explained in this letter, Metropolitan has provided detailed information regarding its budget and cost allocation methodology. In addition, Metropolitan has held three workshops in which staff made presentations further explaining the extensive material provided and answered questions directly from Metropolitan directors. Metropolitan's staff also holds monthly Member Agency Managers meetings with staff from each of its member agencies. SDCWA staff, like staff from any other agency, has the opportunity to discuss with Metropolitan staff matters pending before the Metropolitan Board.

V. "There is no demonstrated justification for suspension of the ad valorem tax rate limitation"

You claim that the proposal to suspend the limitation in Section 124.5 to permit Metropolitan to continue to maintain the current ad valorem ("AV") property tax rate is not supported by data and is flawed. (3/1//18 Ltr., pp. 3-4.) We direct you to the data supporting the recommendation to continue the suspension, which is available at <http://www.mwdh2o.com/WhoWeAre/Pages/FYs-2018-19-2019-20-proposed-property-tax-rates.aspx>. Additionally, we address herein your claim that the recommendation is flawed, which appears to be based on two points.

First, you state that a greater portion of Metropolitan's State Water Contract ("SWC") costs should be recovered from rates and charges than from AV property taxes. They are. Metropolitan's proposed Biennial Budget for FY 2018/19 and FY 2019/20 includes \$566.7 million and \$602.5 million, respectively, for SWC costs. (See, proposed Biennial Budget, p. 8.) The proposal to suspend the property tax limitation of Section 124.5 to continue the AV tax at .0035 percent of assessed valuations would permit Metropolitan to collect \$89.2 million in FY 2018/19 and \$93.4 million in FY 2019/20 from AV property taxes over the 124.5 limitation to offset SWC costs. (See, id. at p. 6; see also, 3/13/18 Presentation, Slide 8.) Thus, the proposal to continue to suspend the Section 124.5 limitation would allow for the collection of about 17 to 18 percent of Metropolitan's SWC costs in each fiscal year. The remaining approximately 82 to 83 percent of SWC costs would continue to be recovered directly from Metropolitan's member agencies through rates and charges.

Your suggestion that the AV property taxes and the Readiness-to-Serve ("RTS") charge are interchangeable ignores that under Metropolitan's cost allocation methodology, costs must be recovered pursuant to their functionalization. A reduction in AV tax revenue does not result in an equivalent increase in the RTS charge. However, if SDCWA believes these costs should be borne directly by the member agency and not by property owners within its service area, SDCWA may elect to pay that obligation. Metropolitan's Act, at Section 336, provides that any member agency "may elect to pay out of the agency funds of such agency, other than funds derived from ad valorem property taxes, all or the stated percentage, as the case may be, of the amount of tax which would otherwise be levied upon property within such agency." (Metropolitan Water District Act, § 336.)

Mr. Mark J. Hattam

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March 23, 2018

Second, you rely on erroneous information regarding the SWC costs in Metropolitan's Biennial Budget. SWC costs are lower in FY 2018/19 due to global cost reductions achieved by Water Resource Management staff and other State Water Contractors working with the Department of Water Resources. These reductions affect both the Delta Water Charge and the Transportation Charge capital and Operations, Maintenance, Power and Recovery (OMP&R). SWC costs then increase from this lower base beginning in FY 2019/20 and continuing throughout the ten-year forecast.

VI. "The purported PAYGo Funding policy and 'Resolution for Reimbursement' would allow revenues to be collected for one purpose but used for another without any consideration of or adjustment for cost of service requirements"

Your objection to the PAYGo policy and resolutions of reimbursement is misplaced. The objection is based on the premise that the determination of whether to use cash or debt is a cost allocation issue. It is not.

Moreover, Metropolitan uses debt proceeds for its capital expenses, whether it is to pay concurrent expenses or through reimbursement of expenses previously funded by cash.

Finally, it appears you are suggesting that it is not the Board that makes the decision as to a resolution of reimbursement. As stated in Metropolitan's February 13, 2018 Information Board Letter, at page 5, the resolution "will be provided to the Board for consideration and approval."

VII. "Demand that MWD set aside principal and prejudgment interest at 10% for the WSR Exchange Agreement overcharges consistent with Court of Appeal decision"

As you know, Metropolitan sets aside the exchange agreement payments that SDCWA disputes, and interest thereon, pursuant to Section 12.4(c) of the exchange agreement. Section 12.4(c) requires that Metropolitan set aside disputed amounts in an interest bearing account and that the prevailing party pay "all interest earned thereon" upon resolution of the dispute. That is what Metropolitan has done. Metropolitan has no separate statutory obligation to set aside statutory prejudgment interest in advance of a judgment. And as you know, the Court of Appeal's decision as to prejudgment interest addresses the interest rate that applies to any award of damages in that case, not to the amount Metropolitan must set aside pursuant to the contractual provision. (*See, SDCWA v. Metropolitan* (2017) 12 Cal.App.5th 1124, 1154-55.)

VIII. "Demand that MWD not impose its Water Stewardship Rate on any wheeled water"

Metropolitan does not "impose" its rates on its voluntary cooperative of member agencies. Pursuant to state statute, the Board, made up of each of those agencies' representatives, sets the rates applicable to the services Metropolitan provides to those same agencies. The Board will

Mr. Mark J. Hattam

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March 23, 2018

decide on April 10, 2018 whether to adopt the proposed rates and charges, which continue to properly include the Water Stewardship Rate.

As you know, the Court of Appeal held that the “record [before it] fail[ed] to support Metropolitan’s inclusion of the water stewardship rate as a transportation cost” for the years at issue, which were 2011-2014. (*SDCWA v. Metropolitan*, 12 Cal.App.5th at 1150.) And it confirmed that “the narrow question [in that appeal] is whether substantial evidence supports Metropolitan’s determination.” (*Id.* at 1151.) Thus, Metropolitan’s adoption of rates, including its Water Stewardship Rate, does not violate the Court of Appeal’s decision. Metropolitan’s proposed rates and charges are based on the administrative record before the Board at the time it adopts the rates and charges for the new biennium period.

IX. “Request for calculation of offsetting benefits under the Wheeling Statute”

The parties obviously disagree as to the interpretation of the Court of Appeal’s decision regarding the applicability of Water Code Section 1810, *et seq.* But what is clear is that the Court of Appeal decision does not address whether Metropolitan “must calculate the offsetting benefits of the Water Authority’s Exchange Agreement” fifteen years after the effectiveness of that agreement, as you demand (*SDCWA v. Metropolitan*, 12 Cal.App.5th 1124) and this has not been part of the parties’ litigation. Neither the Court of Appeal decision, nor any other law, requires that Metropolitan calculate any alleged “offsetting benefits.”

Based on the foregoing, Metropolitan has responded to the “high level comments and questions” in your March 11, 2018 letter. Should you have any further questions, please feel free to contact either of the undersigned.

Sincerely,



Gary Breaux
Assistant General Manager
Chief Financial Officer



Marcia Scully
General Counsel

cc: Metropolitan Board of Directors
SDCWA Board of Directors
Jeffrey Kightlinger, Metropolitan General Manager
Maureen Stapleton, SDCWA General Manager

Mr. Mark J. Hattam

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March 23, 2018

Attachments:

Letter dated March 11, 2018 regarding March 12 F&I Committee/Budget and Rates Workshop #3, and March 13, 2018 Board Meeting Agenda Item 4 Public Hearings

Letter dated March 21, 2018 re Response to Public Records Act Request dated March 11, 2018 and Response to Request for Data and Proposed Methodology dated March 11, 2018

the final Budget Document.

II. MWD's Cost of Service methodology is flawed because it fails to analyze cost causation or account for or assign costs by customer class

Separate and apart from the fact that it is not possible to replicate how MWD has assigned its costs to rates without access to its rate model, the underlying methodology is obviously flawed due to MWD's failure to analyze or account for the varying demands and service characteristics of its 26 member agencies, which MWD admits exist. One of the basic principles of cost of service and ratemaking is to group customers with similar demand and usage patterns in common categories (classes), so that costs may be assigned to the customer classes that cause these costs to be incurred. In spite of the different service patterns and use characteristics of MWD's member agencies, MWD has simply declared by legislative fiat that it has only one customer class.

Historically, MWD has claimed that Proposition 26 and cost of service requirements do not apply to its rates, and that the only test is one of "reasonableness." Although the Court of Appeal in the 2010/2012 Rate Case clearly applied Proposition 26, MWD persists in insisting that Proposition 26 and cost of service requirements do not apply to MWD's rates.¹

III. Request for public records under California Public Records Act (Gov. Code § 6250 *et seq.*)

As you know, the Water Authority is seeking public disclosure of the rate model MWD uses to allocate costs and set its rates and charges. We filed a Public Records Act (PRA) request on February 18, 2016 (Attachment 1), requesting disclosure of the 2016 rate model and various data, analyses and studies as described in paragraphs 1-8 of that letter. We hereby make formal demand for the 2018 rate model and all supporting data as described in paragraphs 1-8 and any other "input" MWD relied on to establish the 2018 proposed rates and charges for calendar years 2019 and 2020. We also request:

1. A copy of the "Financial Planning Model Manual" Mr. Van den Berg identified and described during his deposition on May 11, 2017 (at pages 69-72).
2. A functional copy of the 2018 Budget Document as it is maintained in the ordinary course of business, in which the links are not disabled.

IV. Written Request for Notice (Gov. Code §54999.7(d); Request for Data and Proposed Methodology for Establishing Rates and Charges (Gov. Code § 54999.7(e))

The Water Authority hereby makes formal request to be provided with all of the data and proposed methodology MWD will rely upon for establishing rates, charges and surcharges or fees for 2019 and 2020 in accordance with the above-listed Government Code provisions. The Water Authority and its MWD board delegates have previously requested this information but thus far none has been provided except as contained in the Budget Document.

With only one month remaining before the MWD board votes on the proposed rates and charges, not all of the underlying data "input" has been provided to MWD's member agencies or the public except in the summary form contained in the Budget Document. Obviously, not all information has been made available prior to the public hearing on March 13, 2018. Given MWD's assertions about the complexity of its ratemaking process, with a rate model that purportedly consists of more than 350,000 mathematical formulas, links and calculations, MWD's failure to provide the requested information is wholly unacceptable and contrary to law.

V. There is no demonstrated justification for suspension of the ad valorem tax rate limitation

As expressed by the Water Authority on many prior occasions, Section 124.5 of the MWD Act allows the board to suspend the tax limitation, but only after it finds that the suspension is "essential to the fiscal integrity of the district." The purported reason for the proposed suspension in 2019 and 2020 is to "pay for growing State Water Contract costs" and to "help maintain a balance between fixed and variable revenues, and reduce the impact of future water rate increases." However, this justification is not supported by data and is flawed.

First, the proposed tax rate suspension—in order to "reduce the impact of future water rate increases—is contrary to the legislative history of Section 124.5, which expressed the intent that taxes be reduced and that user rates and charges constitute the great preponderance of MWD's revenues. A greater reliance on rates over taxes also better allows costs to be assigned to the customer groups that cause specific costs to be incurred.

While MWD's objective of maintaining a balance between fixed and variable revenues is certainly proper, reducing the very charges the Legislature provided to MWD to be used in lieu of property taxes is inconsistent with that objective. The proposed suspension of the tax rate will increase MWD's tax revenues by 16 percent between 2018 and 2019, but the readiness-to-serve (RTS) charge is proposed to decrease by 5 percent during the same period. In fact, the pattern of *decreasing* RTS and *increasing* tax revenues carries forward in the proposed financial forecast.

When comparing the financial forecast proposed in this budget and the one adopted in 2016, MWD is projecting a higher tax revenue trend (staff is apparently planning to continue the tax rate limitation suspension indefinitely), and a lower RTS collection during the same period. As an example, in 2026, the projected RTS collection would be 15 percent lower than that projected for the same year in the 2016 biennial budget, while the projected tax revenues for the same year (2026) is 5.5 percent higher than previously forecasted.

Finally, MWD staff reported that State Water Contract (SWC) costs are projected to be reduced from what was previously forecast due to delayed implementation of WaterFix and MWD's staff's successful negotiation with Department of Water Resources to reduce future expenditures. Since

these costs are less than the fiscal year 2018 budgeted SWC costs (and the SWC costs forecasted in the adopted financial forecast for fiscal year 2019), staff's justification for the tax rate limitation suspension -- because it purportedly is needed to cover "growing" SWC costs -- is baseless.

VI. The purported PAYGo Funding policy and "Resolution for Reimbursement" would allow revenues to be collected for one purpose but used for another without any consideration of or adjustment for cost of service requirements

The Water Authority strongly opposes the so-called "Resolution for Reimbursement." MWD apparently plans to use PAYGo revenues as a discretionary fund, by adopting a "Resolution for Reimbursement" to allow the use of revenues from PAYGo to pay for operations expenses, before a need is even identified. This resolution would authorize staff to prospectively collect \$120 million annually for one purpose (CIP) but then potentially use it for another purpose (O&M or California WaterFix). This is not only an unsound fiscal strategy lacking in transparency, but it also deliberately avoids any accountability ("true up") or tie to cost of service. The board should make a decision now on whether to raise rates, plan to borrow money or, notably, reduce costs rather than engage in the gimmick of the proposed Resolution.

VII. Demand that MWD set aside principal and prejudgment interest at 10% for the WSR Exchange Agreement overcharges consistent with Court of Appeal decision

In February Board Memo 9-1, the following is stated on page 5:

"Metropolitan holds \$52.8 million in its financial reserves in accordance with the set-aside provision of the 2003 Amended and Restated Exchange Agreement between Metropolitan and SDCWA (exchange agreement). This amount includes \$51 million associated with exchange agreement water deliveries from January 2011 through October 2017 and \$1.8 million in accumulated interest earned thereon, based on Metropolitan's investment portfolio."

We believe this set-aside is too low, and not in compliance with the Court of Appeal's decision, where the Court stated, on pages 1155-56 of its decision:

"Metropolitan contends the statutory rate of interest was wrongly used in the original proceedings because the exchange agreement stipulates a contractual rate. This contention is unsupported by the terms of the exchange agreement, as the trial court rightly held."

MWD is well aware that the prejudgment interest rate found by the trial court is 10 percent, not the rate "based on Metropolitan's investment portfolio." Our calculations show that the actual amount that should be reserved by MWD through 2018 is approximately \$87 million, which includes both principal and prejudgment interest – leaving about a \$34 million deficit in what MWD is now actually

withholding and reporting to the Board. If MWD's Board approves not charging the Water Stewardship Rate (WSR) to the Exchange Agreement water through the rest of 2018, that total will of course drop slightly. Demand is hereby made by the Water Authority that MWD properly set aside all principal and prejudgment interest at 10% for the WSR Exchange Agreement overcharges through 2018, or any earlier date the MWD board may end the overcharges in 2018.

VIII. Demand that MWD not impose its Water Stewardship Rate on any wheeled water

In February Board memo 9-1, MWD seeks approval by its Board to suspend imposition of WSR charges on Exchange Agreement water, while still imposing them on other wheeling transactions. For example, see page 5 of February Board memo 9-1, which states that the reduction applies only to Exchange Agreement water, with no mention of other wheeled water:

"[I]t is proposed that the Water Stewardship Rate will not be billed on the exchange agreement deliveries for CYs 2019 and 2020, with Metropolitan foregoing any collection of these amounts during this study period. Further, it is recommended that Metropolitan suspend billing and collecting the current Water Stewardship Rate on exchange agreement deliveries in CY 2018."

See also page 102 of Attachment 3 to the above document, which makes clear wheeled water would be assessed WSR charges (emphasis added): "All system users (member agency or third parties) will pay the same proportional costs for existing and future conservation and recycling investments."

However, the Court of Appeal's ruling was based on the Wheeling Law (Water Code sections 1810 *et seq.*), and the Court found that under that law MWD cannot charge the WSR on wheeled water: "A water agency's payments to its members to encourage water conservation is outside the scope of recoverable costs contemplated by the wheeling statutes." *Id.* at 1150.

MWD's decision to impose WSR charges on wheeled water is in clear violation of the Court of Appeal's decision, and thus unlawful. Though we appreciate the fact that MWD staff recommends not making unlawful charges against the Exchange Agreement, it is clear that MWD may not impose the same unlawful charges to all other wheeling transactions. Demand is hereby made by the Water Authority that MWD not adopt rates that allow for WSR charges to be assessed against wheeled water.

IX. Request for calculation of offsetting benefits under the Wheeling Statute

As you are aware, the Court of Appeal determined that the Wheeling Statutes apply to the Exchange Agreement between MWD and the Water Authority. Accordingly, under Water Code § 1811(c), and consistent with MWD Board Resolution 8520, MWD must calculate the offsetting benefits of the Water Authority's Exchange Agreement water. Because MWD's wheeling rate, and the Water Authority's price under the Exchange Agreement, is calculated in part based on the setting of MWD's

annual rates, MWD should perform this calculation now as part of this budget and rate-setting cycle, so that these costs may properly be reflected in MWD's budget, and long term planning and disclosure documents. The Water Authority identified this issue to MWD last November as a litigation issue remaining to be resolved between MWD and the Water Authority, but as you are aware, the MWD and Water Authority negotiating teams have not yet met.

X. Conclusion

Our MWD board representatives have additional policy questions and comments that will be presented separately.

Sincerely,



Mark J. Hattam
General Counsel

Attachment: Water Authority's Public Records Act request for MWD rate model, dated February 18, 2016

cc: MWD Board of Directors
Water Authority Board of Directors
Maureen Stapleton, General Manager

ⁱ Contrary to a recent public statement by one of Metropolitan's attorneys, the Court of Appeal did in fact apply Proposition 26 to Metropolitan's rates.

Ms. Dawn Chin
February 18, 2016
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- Printed matter (including published articles, speeches, newspaper clippings, press releases, and photographs); and
- Microfilm and microfiche, disks, computer files, electronically stored data (including the metadata associated with any such written and/or spoken content), electronically stored information, electronic devices, film, tapes, and other sources from which information can be obtained, including materials used in electronic data processing. "Electronic" means relating to technology having electrical, digital, magnetic, wireless, optical, electromagnetic, or similar capabilities. "Electronically stored information" means information that is stored in an electronic medium, including data, metadata, and all electronically stored data or information.

The term "related to," as used in each category of public record listed below, means directly or indirectly, in whole or in part, comprising, referring to, concerning, evidencing, connected with, commenting on, affecting, responding to, showing, describing, discussing, analyzing, reflecting or constituting.

The term "rate model," as used in each category of public record listed below, means all documents, data, analyses, calculations, studies or other information that constitute, comprise, support or describe the manner in which MWD assigns costs to rates, including but not limited to its "financial planning model," including the spreadsheet, formulas and programming code.

If a record responsive to a request was, but no longer is, in your possession, custody, or control, state precisely what disposition was made of it (including its present location and who possesses or controls it) and identify the person(s) who authorized or ordered such disposition.

Records produced in response to this request should be produced as they are kept in the usual course of business or should be organized and labeled to correspond with the categories in the request. All electronically stored information shall be produced in its native format with all metadata intact.

The requested records are:

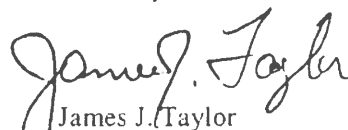
1. Any rate model or models used in formulating proposed rates for the 2017 and 2018 calendar years.
2. All data, analyses and studies, if any, and cost of service analysis used to generate or supporting the rates and charges proposed for the 2017 and 2018 calendar years, as described in MWD Board Memo 9-2 dated 2/9/2016 (Finance and Insurance Committee).
3. All data, analyses and studies, if any, and cost of service analysis used to generate or supporting a proposed reduction of the Readiness-to-Serve and Capacity Charges for 2017.
4. All data, analyses and studies, if any, demonstrating the proportionate benefit each of MWD's 26 customer member agencies will receive from the expenditure of revenues collected from the rates and charges proposed for the 2017 and 2018 calendar years.
5. All data, analyses and studies, if any, that support the conclusion that demand management programs provide distribution and conveyance system benefits, including identification of those parts of the distribution and conveyance system where additional capacity is needed and the customer member agencies that benefit from that capacity being made available.

Ms. Dawn Chin
February 18, 2016
Page 3

6. All data, analyses, opinions and studies, if any, that support the conclusion that suspension of the property tax restriction in Section 124.5 of the MWD Act is essential to MWD's fiscal integrity, as described in MWD Board Memo 9-2 at page 3.
7. All data, analyses and studies, if any, supporting the findings, conclusions, recommendations and water supply development targets identified in MWD's 2015 IRP Technical Update Issue Paper Addendum.
8. All data, analyses and studies, if any, supporting the findings, conclusions, recommendations and water supply development targets identified in MWD's Integrated Water Resources Plan 2015 Update.

Within ten (10) days of receipt of this PRA request, please contact me at (858) 522-6791 to discuss whether MWD has records responsive to this request, the page count and cost of copying the records, and whether the documents are also available in electronic format.

Sincerely,


James J. Taylor
Acting General Counsel

cc: MWD Public Records Administrator (by email at pradministrator@mwdofmsa.com)



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Counsel

March 21, 2018

VIA EMAIL AND FEDERAL EXPRESS

Mark J. Hattam
General Counsel
San Diego County Water Authority
4677 Overland Avenue
San Diego, California 92123-1233

Re: Response to Public Records Act Request Dated March 11, 2018
Response to Request for Data and Proposed Methodology Dated March 11, 2018

Dear Mr. Hattam:

We received your letter dated Sunday, March 11, 2018, which was sent to Metropolitan Board of Directors Chairman Randy Record and the Metropolitan Board of Directors via email at 10:31 p.m. on that date, which among other things contains a Public Records Act (“PRA”) request in section III (“2018 request”) and a request for data and proposed methodology in section IV. A copy of your request is attached.

Public Records Act Request

This response is made in compliance with California Government Code Section 6253(c), which requires an agency to notify a person making a request within 10 days whether a request seeks disclosable records. We have determined that your request seeks disclosable records, with the exception of Metropolitan’s financial planning model, which is exempt from disclosure under Government Code Section 6254.9(a) as a proprietary computer software program developed by Metropolitan that contains nondisclosable formulas and programming code. The model is also not subject to disclosure under Government Code Section 6254(k), Evidence Code Section 1060, and Civil Code Section 3426.1 as confidential, proprietary material that derives independent economic value from not being generally known. The model is further not subject to disclosure under Government Code Section 6255(a) because the public interest in preserving its confidentiality clearly outweighs any asserted public interest in disclosure.¹

¹ SDCWA already received the financial planning model through the *SDCWA v. Metropolitan* rate litigation, subject to the parameters and restrictions of the Court’s protective order, so SDCWA has had full opportunity to view it and understand its operations.

Mr. Mark J. Hattam

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March 21, 2018

Metropolitan will provide disclosable records as explained below, to the extent they: (1) are not already posted on Metropolitan's website at www.mwdh20.com, (2) have not already been provided to the Metropolitan Board of Directors, and/or (3) have not already been provided to SDCWA in response to its prior PRA requests or in connection with the *SDCWA v. Metropolitan* litigation.

Your 2018 request incorporates paragraphs 1-8 of an attached letter dated February 18, 2016 ("2016 request") in which the San Diego County Water Authority ("SDCWA") made previous requests under the PRA. Paragraphs 7 and 8 of the 2016 request concerned records pertaining to Metropolitan's 2015 IRP Technical Update Issue Paper Addendum and IRP 2015 Update. Metropolitan previously responded to those requests in 2016.

Paragraphs 1-6 of the 2016 request concerned records pertaining to the budget, rates, and charges proposed in 2016, and Metropolitan also previously responded to those requests in 2016. We have assumed you intended Metropolitan to interpret the 2018 request's reference to paragraphs 1-6 to include modifications to concern records pertaining to the fiscal years 2018/19 and 2019/20 proposed budget and calendar years 2019 and 2020 proposed rates and charges, and so we have done so. The 2018 request further asks for "any other 'input' MWD relied on to establish the 2018 proposed rates and charges for calendar years 2019 and 2020." We interpret this additional language as referring to "any other input into the financial planning model that MWD relied on to establish the 2018 proposed rates and charges for calendar years 2019 and 2020." The requested records have already been posted on Metropolitan's website for public review between February 1 and March 14, 2018 at the following locations:

- <http://www.mwdh20.com/WhoWeAre/Pages/proposed-budget-rates.aspx>
- <http://www.mwdh20.com/WhoWeAre/proposed-property-tax-rates>

Of these records, some of the file names at the following location, posted since March 8, 2018, were modified to accommodate the naming conventions required by Metropolitan's website:

- <http://www.mwdh20.com/WhoWeAre/Management/Financial-Information/Pages/2018-Underlying-Materials.aspx>

The identical records, but with the original file names, will be provided to you on a disc. For example, the files from the "Biennial Budget Reports\Labor Distribution by Org Report\Proposed plus 1" folder on the disc were renamed on the website by adding the prefix 'PP1' to each of the files posted on the website. In the posting and on the disc, proprietary formulas and programming code have been removed from spreadsheets, and employee-specific information has been redacted.

Additionally, your 2018 request asks for "a functional copy of the 2018 Budget Document." Metropolitan interprets this request as referring to the proposed Biennial Budget for Fiscal Years 2018/19 and 2019/20, which was provided to Metropolitan's Board of Directors, including the

Mr. Mark J. Hattam

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March 21, 2018

SDCWA delegates, on February 1, 2018, and has been posted for public review on Metropolitan's website since that date at the following location:

- <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>

There is no such record as a "functional copy" of that document.

Finally, your 2018 request asks for the "Financial Planning Model Manual Mr. Van den Berg identified and described during his deposition on May 11, 2017." This will be provided with redaction of the confidential log-in information to the model pursuant to Government Code Section 6255(a), because the public interest in preserving its confidentiality clearly outweighs any asserted public interest in disclosure.

Enclosed is a disc containing the above-described disclosable Metropolitan records provided in response to your PRA request, except as previously posted or provided. Because Metropolitan's budget-setting and rate-setting process is still in progress, the disc contains materials through the Public Hearings held on March 13, 2018.

Response to Request for Data and Proposed Methodology

Your request for data and proposed methodology was made under California Government Code Section 54999.7(e). As Metropolitan has explained in detail in the *SDCWA v. Metropolitan* litigation, and as SDCWA previously agreed, Section 54999.7(e) does not apply to Metropolitan. As you are aware, the California Court of Appeal did not decide the issue of Section 54999.7(e)'s application, finding instead that whether or not the statute is applicable, Metropolitan has complied with it. (*SDCWA v. Metropolitan* (2017) 12 Cal. App. 5th 1124, 1154 ["Whether or not the statute applies, it has not been violated."].) Metropolitan maintains that Section 54999.7(e) does not apply.²

Nonetheless, as part of its regular budget-setting and rate-setting process, Metropolitan provides to the Board, member agencies and the public the detailed data and proposed methodology for the proposed rates and charges, through the budget and rate Board letters, proposed budget, cost of service report, presentations and discussions at the multiple committee and Board meetings and workshops. Again, this material is posted on Metropolitan's website at the following locations:

- <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>
- <http://www.mwdh2o.com/WhoWeAre/proposed-property-tax-rates>

² Your letter also included a written request for notice under California Government Code Section 54999.7(d). Aside from the inapplicability of Section 54999.7(d), SDCWA made this request for notice of a public meeting concerning rates or charges after Metropolitan had already provided such notice to the Board and public, so the request is moot.

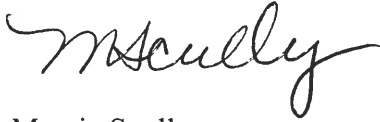
Mr. Mark J. Hattam

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March 21, 2018

As the staff continues to work on budget and rate matters in response to requests from the Board and direction from management until final adoption of the budget and rates, the webpages stated in this letter will continue to be updated.

Very truly yours,

A handwritten signature in black ink, appearing to read "MScully", written in a cursive style.

Marcia Scully
General Counsel

Enclosure: Disc (via Federal Express only)



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Counsel

March 21, 2018

VIA EMAIL AND FEDERAL EXPRESS

Mark J. Hattam
General Counsel
San Diego County Water Authority
4677 Overland Avenue
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¹ SDCWA already received the financial planning model through the *SDCWA v. Metropolitan* rate litigation, subject to the parameters and restrictions of the Court’s protective order, so SDCWA has had full opportunity to view it and understand its operations.

Mr. Mark J. Hattam

Page 2

March 21, 2018

Metropolitan will provide disclosable records as explained below, to the extent they: (1) are not already posted on Metropolitan's website at www.mwdh20.com, (2) have not already been provided to the Metropolitan Board of Directors, and/or (3) have not already been provided to SDCWA in response to its prior PRA requests or in connection with the *SDCWA v. Metropolitan* litigation.

Your 2018 request incorporates paragraphs 1-8 of an attached letter dated February 18, 2016 ("2016 request") in which the San Diego County Water Authority ("SDCWA") made previous requests under the PRA. Paragraphs 7 and 8 of the 2016 request concerned records pertaining to Metropolitan's 2015 IRP Technical Update Issue Paper Addendum and IRP 2015 Update. Metropolitan previously responded to those requests in 2016.

Paragraphs 1-6 of the 2016 request concerned records pertaining to the budget, rates, and charges proposed in 2016, and Metropolitan also previously responded to those requests in 2016. We have assumed you intended Metropolitan to interpret the 2018 request's reference to paragraphs 1-6 to include modifications to concern records pertaining to the fiscal years 2018/19 and 2019/20 proposed budget and calendar years 2019 and 2020 proposed rates and charges, and so we have done so. The 2018 request further asks for "any other 'input' MWD relied on to establish the 2018 proposed rates and charges for calendar years 2019 and 2020." We interpret this additional language as referring to "any other input into the financial planning model that MWD relied on to establish the 2018 proposed rates and charges for calendar years 2019 and 2020." The requested records have already been posted on Metropolitan's website for public review between February 1 and March 14, 2018 at the following locations:

- <http://www.mwdh20.com/WhoWeAre/Pages/proposed-budget-rates.aspx>
- <http://www.mwdh20.com/WhoWeAre/proposed-property-tax-rates>

Of these records, some of the file names at the following location, posted since March 8, 2018, were modified to accommodate the naming conventions required by Metropolitan's website:

- <http://www.mwdh20.com/WhoWeAre/Management/Financial-Information/Pages/2018-Underlying-Materials.aspx>

The identical records, but with the original file names, will be provided to you on a disc. For example, the files from the "Biennial Budget Reports\Labor Distribution by Org Report\Proposed plus 1" folder on the disc were renamed on the website by adding the prefix "PP1" to each of the files posted on the website. In the posting and on the disc, proprietary formulas and programming code have been removed from spreadsheets, and employee-specific information has been redacted.

Additionally, your 2018 request asks for "a functional copy of the 2018 Budget Document." Metropolitan interprets this request as referring to the proposed Biennial Budget for Fiscal Years 2018/19 and 2019/20, which was provided to Metropolitan's Board of Directors, including the

Mr. Mark J. Hattam

Page 3

March 21, 2018

SDCWA delegates, on February 1, 2018, and has been posted for public review on Metropolitan's website since that date at the following location:

- <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>

There is no such record as a "functional copy" of that document.

Finally, your 2018 request asks for the "Financial Planning Model Manual Mr. Van den Berg identified and described during his deposition on May 11, 2017." This will be provided with redaction of the confidential log-in information to the model pursuant to Government Code Section 6255(a), because the public interest in preserving its confidentiality clearly outweighs any asserted public interest in disclosure.

Enclosed is a disc containing the above-described disclosable Metropolitan records provided in response to your PRA request, except as previously posted or provided. Because Metropolitan's budget-setting and rate-setting process is still in progress, the disc contains materials through the Public Hearings held on March 13, 2018.

Response to Request for Data and Proposed Methodology

Your request for data and proposed methodology was made under California Government Code Section 54999.7(e). As Metropolitan has explained in detail in the *SDCWA v. Metropolitan* litigation, and as SDCWA previously agreed, Section 54999.7(e) does not apply to Metropolitan. As you are aware, the California Court of Appeal did not decide the issue of Section 54999.7(e)'s application, finding instead that whether or not the statute is applicable, Metropolitan has complied with it. (*SDCWA v. Metropolitan* (2017) 12 Cal. App. 5th 1124, 1154 ["Whether or not the statute applies, it has not been violated."].) Metropolitan maintains that Section 54999.7(e) does not apply.²

Nonetheless, as part of its regular budget-setting and rate-setting process, Metropolitan provides to the Board, member agencies and the public the detailed data and proposed methodology for the proposed rates and charges, through the budget and rate Board letters, proposed budget, cost of service report, presentations and discussions at the multiple committee and Board meetings and workshops. Again, this material is posted on Metropolitan's website at the following locations:

- <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx>
- <http://www.mwdh2o.com/WhoWeAre/proposed-property-tax-rates>

² Your letter also included a written request for notice under California Government Code Section 54999.7(d). Aside from the inapplicability of Section 54999.7(d), SDCWA made this request for notice of a public meeting concerning rates or charges after Metropolitan had already provided such notice to the Board and public, so the request is moot.

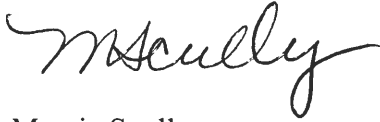
Mr. Mark J. Hattam

Page 4

March 21, 2018

As the staff continues to work on budget and rate matters in response to requests from the Board and direction from management until final adoption of the budget and rates, the webpages stated in this letter will continue to be updated.

Very truly yours,

A handwritten signature in black ink, appearing to read "MScully". The signature is written in a cursive, flowing style with a large initial "M" and a long, sweeping tail.

Marcia Scully
General Counsel

Enclosure: Disc (via Federal Express only)



San Diego County Water Authority

4677 Overland Avenue • San Diego, California 92123-1233
(858) 522-6600 FAX (858) 522-6568 www.sdcwa.org

March 11, 2018

Randy Record, Chairman
and Board of Directors
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054

MEMBER AGENCIES

- Carlsbad Municipal Water District
- City of Del Mar
- City of Escondido
- City of Imperial Valley
- City of Lancaster
- City of San Diego
- City of San Marcos
- City of Vista
- City of Warner
- City of Westfall
- City of Yuma
- City of San Diego
- City of San Marcos
- City of Vista
- City of Warner
- City of Westfall
- City of Yuma
- City of San Diego
- City of San Marcos
- City of Vista
- City of Warner
- City of Westfall
- City of Yuma

RE: March 12 Finance and Insurance Committee/Budget and Rates Workshop #3
Agenda Item 8: Budget and Rates Workshop #3

March 13, 2018 Board Meeting Agenda Item 4 Public Hearings

Public hearing to consider whether to continue suspending the tax rate limitations in Section 124.5 of the Metropolitan Water District Act to maintain the ad valorem tax rate for fiscal years 2018/19 and 2019/20

Public hearing on proposed water rates and charges for calendar years 2019 and 2020 to meet revenue requirements

Dear Chairman Record and Board Members:

On behalf of the San Diego County Water Authority, the purpose of this letter is to make a formal request for records as stated below, and, provide high level comments and questions on Board Memo 8-1 dated February 13, 2018 setting this combined public hearing and Information Board Memo 9-2 of the same date on the subject: Proposed biennial budget and revenue requirements for fiscal years 2018/19 and 2019/20; proposed water rates and charges for calendar years 2019 and 2020 to meet revenue requirements for fiscal years 2018/19 and 2019/20; ten-year forecast; and Cost of Service Report (collectively, the "Budget Document").

I. The Budget Document lacks sufficient detail to track past or proposed expenditures, or determine how MWD has allocated its costs to arrive at the proposed rates and charges

The Water Authority's board representatives have repeatedly requested that staff provide projected actual expenditures by line item and category as part of the budget and rate setting process. This information is essential to meaningful deliberation of MWDs proposed revenue requirements and is standard industry practice in budgeting and rate setting for public utilities. While we are aware that the PowerPoint slides for March 12 include "budget vs actual" charts, they do not provide the level of detail needed for meaningful review. We request again that the data by line item and category be provided, in addition, and that the projected actuals be included where budget data is presented in

the final Budget Document.

II. MWD's Cost of Service methodology is flawed because it fails to analyze cost causation or account for or assign costs by customer class

Separate and apart from the fact that it is not possible to replicate how MWD has assigned its costs to rates without access to its rate model, the underlying methodology is obviously flawed due to MWD's failure to analyze or account for the varying demands and service characteristics of its 26 member agencies, which MWD admits exist. One of the basic principles of cost of service and ratemaking is to group customers with similar demand and usage patterns in common categories (classes), so that costs may be assigned to the customer classes that cause these costs to be incurred. In spite of the different service patterns and use characteristics of MWD's member agencies, MWD has simply declared by legislative fiat that it has only one customer class.

Historically, MWD has claimed that Proposition 26 and cost of service requirements do not apply to its rates, and that the only test is one of "reasonableness." Although the Court of Appeal in the 2010/2012 Rate Case clearly applied Proposition 26, MWD persists in insisting that Proposition 26 and cost of service requirements do not apply to MWD's rates.¹

III. Request for public records under California Public Records Act (Gov. Code § 6250 *et seq.*)

As you know, the Water Authority is seeking public disclosure of the rate model MWD uses to allocate costs and set its rates and charges. We filed a Public Records Act (PRA) request on February 18, 2016 (Attachment 1), requesting disclosure of the 2016 rate model and various data, analyses and studies as described in paragraphs 1-8 of that letter. We hereby make formal demand for the 2018 rate model and all supporting data as described in paragraphs 1-8 and any other "input" MWD relied on to establish the 2018 proposed rates and charges for calendar years 2019 and 2020. We also request:

1. A copy of the "Financial Planning Model Manual" Mr. Van den Berg identified and described during his deposition on May 11, 2017 (at pages 69-72).
2. A functional copy of the 2018 Budget Document as it is maintained in the ordinary course of business, in which the links are not disabled.

IV. Written Request for Notice (Gov. Code §54999.7(d); Request for Data and Proposed Methodology for Establishing Rates and Charges (Gov. Code § 54999.7(e))

The Water Authority hereby makes formal request to be provided with all of the data and proposed methodology MWD will rely upon for establishing rates, charges and surcharges or fees for 2019 and 2020 in accordance with the above-listed Government Code provisions. The Water Authority and its MWD board delegates have previously requested this information but thus far none has been provided except as contained in the Budget Document.

With only one month remaining before the MWD board votes on the proposed rates and charges, not all of the underlying data "input" has been provided to MWD's member agencies or the public except in the summary form contained in the Budget Document. Obviously, not all information has been made available prior to the public hearing on March 13, 2018. Given MWD's assertions about the complexity of its ratemaking process, with a rate model that purportedly consists of more than 350,000 mathematical formulas, links and calculations, MWD's failure to provide the requested information is wholly unacceptable and contrary to law.

V. There is no demonstrated justification for suspension of the ad valorem tax rate limitation

As expressed by the Water Authority on many prior occasions, Section 124.5 of the MWD Act allows the board to suspend the tax limitation, but only after it finds that the suspension is "essential to the fiscal integrity of the district." The purported reason for the proposed suspension in 2019 and 2020 is to "pay for growing State Water Contract costs" and to "help maintain a balance between fixed and variable revenues, and reduce the impact of future water rate increases." However, this justification is not supported by data and is flawed.

First, the proposed tax rate suspension—in order to "reduce the impact of future water rate increases—is contrary to the legislative history of Section 124.5, which expressed the intent that taxes be reduced and that user rates and charges constitute the great preponderance of MWD's revenues. A greater reliance on rates over taxes also better allows costs to be assigned to the customer groups that cause specific costs to be incurred.

While MWD's objective of maintaining a balance between fixed and variable revenues is certainly proper, reducing the very charges the Legislature provided to MWD to be used in lieu of property taxes is inconsistent with that objective. The proposed suspension of the tax rate will increase MWD's tax revenues by 16 percent between 2018 and 2019, but the readiness-to-serve (RTS) charge is proposed to decrease by 5 percent during the same period. In fact, the pattern of *decreasing* RTS and *increasing* tax revenues carries forward in the proposed financial forecast.

When comparing the financial forecast proposed in this budget and the one adopted in 2016, MWD is projecting a higher tax revenue trend (staff is apparently planning to continue the tax rate limitation suspension indefinitely), and a lower RTS collection during the same period. As an example, in 2026, the projected RTS collection would be 15 percent lower than that projected for the same year in the 2016 biennial budget, while the projected tax revenues for the same year (2026) is 5.5 percent higher than previously forecasted.

Finally, MWD staff reported that State Water Contract (SWC) costs are projected to be reduced from what was previously forecast due to delayed implementation of WaterFix and MWD's staff's successful negotiation with Department of Water Resources to reduce future expenditures. Since

these costs are less than the fiscal year 2018 budgeted SWC costs (and the SWC costs forecasted in the adopted financial forecast for fiscal year 2019), staff's justification for the tax rate limitation suspension -- because it purportedly is needed to cover "growing" SWC costs -- is baseless.

VI. The purported PAYGo Funding policy and "Resolution for Reimbursement" would allow revenues to be collected for one purpose but used for another without any consideration of or adjustment for cost of service requirements

The Water Authority strongly opposes the so-called "Resolution for Reimbursement." MWD apparently plans to use PAYGo revenues as a discretionary fund, by adopting a "Resolution for Reimbursement" to allow the use of revenues from PAYGo to pay for operations expenses, before a need is even identified. This resolution would authorize staff to prospectively collect \$120 million annually for one purpose (CIP) but then potentially use it for another purpose (O&M or California WaterFix). This is not only an unsound fiscal strategy lacking in transparency, but it also deliberately avoids any accountability ("true up") or tie to cost of service. The board should make a decision now on whether to raise rates, plan to borrow money or, notably, reduce costs rather than engage in the gimmick of the proposed Resolution.

VII. Demand that MWD set aside principal and prejudgment interest at 10% for the WSR Exchange Agreement overcharges consistent with Court of Appeal decision

In February Board Memo 9-1, the following is stated on page 5:

"Metropolitan holds \$52.8 million in its financial reserves in accordance with the set-aside provision of the 2003 Amended and Restated Exchange Agreement between Metropolitan and SDCWA (exchange agreement). This amount includes \$51 million associated with exchange agreement water deliveries from January 2011 through October 2017 and \$1.8 million in accumulated interest earned thereon, based on Metropolitan's investment portfolio."

We believe this set-aside is too low, and not in compliance with the Court of Appeal's decision, where the Court stated, on pages 1155-56 of its decision:

"Metropolitan contends the statutory rate of interest was wrongly used in the original proceedings because the exchange agreement stipulates a contractual rate. This contention is unsupported by the terms of the exchange agreement, as the trial court rightly held."

MWD is well aware that the prejudgment interest rate found by the trial court is 10 percent, not the rate "based on Metropolitan's investment portfolio." Our calculations show that the actual amount that should be reserved by MWD through 2018 is approximately \$87 million, which includes both principal and prejudgment interest – leaving about a \$34 million deficit in what MWD is now actually

withholding and reporting to the Board. If MWD's Board approves not charging the Water Stewardship Rate (WSR) to the Exchange Agreement water through the rest of 2018, that total will of course drop slightly. Demand is hereby made by the Water Authority that MWD properly set aside all principal and prejudgment interest at 10% for the WSR Exchange Agreement overcharges through 2018, or any earlier date the MWD board may end the overcharges in 2018.

VIII. Demand that MWD not impose its Water Stewardship Rate on any wheeled water

In February Board memo 9-1, MWD seeks approval by its Board to suspend imposition of WSR charges on Exchange Agreement water, while still imposing them on other wheeling transactions. For example, see page 5 of February Board memo 9-1, which states that the reduction applies only to Exchange Agreement water, with no mention of other wheeled water:

"[I]t is proposed that the Water Stewardship Rate will not be billed on the exchange agreement deliveries for CYs 2019 and 2020, with Metropolitan foregoing any collection of these amounts during this study period. Further, it is recommended that Metropolitan suspend billing and collecting the current Water Stewardship Rate on exchange agreement deliveries in CY 2018."

See also page 102 of Attachment 3 to the above document, which makes clear wheeled water would be assessed WSR charges (emphasis added): "All system users (member agency or third parties) will pay the same proportional costs for existing and future conservation and recycling investments."

However, the Court of Appeal's ruling was based on the Wheeling Law (Water Code sections 1810 *et seq.*), and the Court found that under that law MWD cannot charge the WSR on wheeled water: "A water agency's payments to its members to encourage water conservation is outside the scope of recoverable costs contemplated by the wheeling statutes." *Id.* at 1150.

MWD's decision to impose WSR charges on wheeled water is in clear violation of the Court of Appeal's decision, and thus unlawful. Though we appreciate the fact that MWD staff recommends not making unlawful charges against the Exchange Agreement, it is clear that MWD may not impose the same unlawful charges to all other wheeling transactions. Demand is hereby made by the Water Authority that MWD not adopt rates that allow for WSR charges to be assessed against wheeled water.

IX. Request for calculation of offsetting benefits under the Wheeling Statute

As you are aware, the Court of Appeal determined that the Wheeling Statutes apply to the Exchange Agreement between MWD and the Water Authority. Accordingly, under Water Code § 1811(c), and consistent with MWD Board Resolution 8520, MWD must calculate the offsetting benefits of the Water Authority's Exchange Agreement water. Because MWD's wheeling rate, and the Water Authority's price under the Exchange Agreement, is calculated in part based on the setting of MWD's

annual rates, MWD should perform this calculation now as part of this budget and rate-setting cycle, so that these costs may properly be reflected in MWD's budget, and long term planning and disclosure documents. The Water Authority identified this issue to MWD last November as a litigation issue remaining to be resolved between MWD and the Water Authority, but as you are aware, the MWD and Water Authority negotiating teams have not yet met.

X. Conclusion

Our MWD board representatives have additional policy questions and comments that will be presented separately.

Sincerely,



Mark J. Hattam
General Counsel

Attachment: Water Authority's Public Records Act request for MWD rate model, dated February 18, 2016

cc: MWD Board of Directors
Water Authority Board of Directors
Maureen Stapleton, General Manager

ⁱ Contrary to a recent public statement by one of Metropolitan's attorneys, the Court of Appeal did in fact apply Proposition 26 to Metropolitan's rates.

Ms. Dawn Chin
February 18, 2016
Page 2

- Printed matter (including published articles, speeches, newspaper clippings, press releases, and photographs); and
- Microfilm and microfiche, disks, computer files, electronically stored data (including the metadata associated with any such written and/or spoken content), electronically stored information, electronic devices, film, tapes, and other sources from which information can be obtained, including materials used in electronic data processing. "Electronic" means relating to technology having electrical, digital, magnetic, wireless, optical, electromagnetic, or similar capabilities. "Electronically stored information" means information that is stored in an electronic medium, including data, metadata, and all electronically stored data or information.

The term "related to," as used in each category of public record listed below, means directly or indirectly, in whole or in part, comprising, referring to, concerning, evidencing, connected with, commenting on, affecting, responding to, showing, describing, discussing, analyzing, reflecting or constituting.

The term "rate model," as used in each category of public record listed below, means all documents, data, analyses, calculations, studies or other information that constitute, comprise, support or describe the manner in which MWD assigns costs to rates, including but not limited to its "financial planning model," including the spreadsheet, formulas and programming code.

If a record responsive to a request was, but no longer is, in your possession, custody, or control, state precisely what disposition was made of it (including its present location and who possesses or controls it) and identify the person(s) who authorized or ordered such disposition.

Records produced in response to this request should be produced as they are kept in the usual course of business or should be organized and labeled to correspond with the categories in the request. All electronically stored information shall be produced in its native format with all metadata intact.

The requested records are:

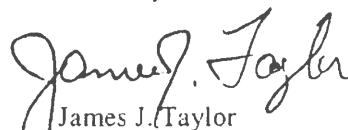
1. Any rate model or models used in formulating proposed rates for the 2017 and 2018 calendar years.
2. All data, analyses and studies, if any, and cost of service analysis used to generate or supporting the rates and charges proposed for the 2017 and 2018 calendar years, as described in MWD Board Memo 9-2 dated 2/9/2016 (Finance and Insurance Committee).
3. All data, analyses and studies, if any, and cost of service analysis used to generate or supporting a proposed reduction of the Readiness-to-Serve and Capacity Charges for 2017.
4. All data, analyses and studies, if any, demonstrating the proportionate benefit each of MWD's 26 customer member agencies will receive from the expenditure of revenues collected from the rates and charges proposed for the 2017 and 2018 calendar years.
5. All data, analyses and studies, if any, that support the conclusion that demand management programs provide distribution and conveyance system benefits, including identification of those parts of the distribution and conveyance system where additional capacity is needed and the customer member agencies that benefit from that capacity being made available.

Ms. Dawn Chin
February 18, 2016
Page 3

6. All data, analyses, opinions and studies, if any, that support the conclusion that suspension of the property tax restriction in Section 124.5 of the MWD Act is essential to MWD's fiscal integrity, as described in MWD Board Memo 9-2 at page 3.
7. All data, analyses and studies, if any, supporting the findings, conclusions, recommendations and water supply development targets identified in MWD's 2015 IRP Technical Update Issue Paper Addendum.
8. All data, analyses and studies, if any, supporting the findings, conclusions, recommendations and water supply development targets identified in MWD's Integrated Water Resources Plan 2015 Update.

Within ten (10) days of receipt of this PRA request, please contact me at (858) 522-6791 to discuss whether MWD has records responsive to this request, the page count and cost of copying the records, and whether the documents are also available in electronic format.

Sincerely,


James J. Taylor
Acting General Counsel

cc: MWD Public Records Administrator (by email at pradministrator@mwdofmsa.com)



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

February 1, 2018

Ms. Maureen Stapleton
General Manager
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Ms. Stapleton:

I would like to bring your attention to Metropolitan's staff recommendation in our budget proposal for fiscal years 2018/19 and 2019/20 and how those recommendations impact the San Diego County Water Authority (SDCWA) and its member agencies with regard to the exchange agreement.

As you are aware, the exchange agreement between Metropolitan and SDCWA sets the price Metropolitan charges SDCWA for exchanging conserved water made available to SDCWA from the Imperial Irrigation District and canal lining, with water Metropolitan delivers to SDCWA, at Metropolitan's transportation rates. In the rate litigation brought by SDCWA challenging Metropolitan's transportation rates, the appellate court ruled Metropolitan may collect State Water Project transportation costs as part of Metropolitan's transportation rates. The proposed rates for 2019 and 2020 accordingly comply with that ruling and continue to collect State Water Project transportation costs in Metropolitan's transportation rates.

The appellate court also found the administrative record before it for the rates in 2011 through 2014 did not support Metropolitan's Water Stewardship Rate allocation to transportation rates, but the court did not address the allocation in subsequent years based on a different record. Metropolitan's policies have supported the belief that conservation and local resource development reduce the demand for imported supplies, which reduces the costs to build, expand, operate, and maintain transportation facilities. In our view, this has a regional benefit for all of Southern California. As you are aware, the issue of avoided costs and their application to transportation rates was not actively briefed or litigated in the cases.

Based on the appellate court decision, we believe this matter merits further study. Later this year, staff intends to begin an internal process with input from the member agencies to further study and determine the most appropriate cost allocation of the Demand Management cost function. This would be an open and transparent process with scheduled workshops and allow for review and comment by all member agencies and Metropolitan's Board. While this review is being conducted, staff is proposing that Metropolitan not bill any amount of the Water

Ms. Maureen Stapleton

Page 2

February 1, 2018

Stewardship Rate on exchange agreement deliveries for calendar years 2019 and 2020. The Water Stewardship Rate would continue to be a part of Metropolitan's full service water rate and the rate for wheeling service. This issue would be revisited in the next biennial budget and rate setting cycle for years 2021 and 2022 when the decision by Metropolitan's Board would be informed by the completed study of the Demand Management cost function.

As for 2018, Metropolitan's previously approved rates include the Water Stewardship Rate as a transportation cost. Staff is further recommending that Metropolitan suspend billing and collecting the current Water Stewardship Rate on exchange agreement deliveries for calendar year 2018. This recommendation cannot become effective without Board authorization, so staff will continue to bill and collect Metropolitan's adopted transportation rates at least through April 2018 when the Board considers this proposal. If the Board adopts staff's recommendation to suspend billing and collecting the Water Stewardship Rate on the exchange agreement deliveries, such monies collected through April 2018 would be refunded to SDCWA.

At this time, this is only a staff recommendation that will be included as part of the proposed biennial budget for fiscal years 2018/19 and 2019/20 to be voted on by the Board in April 2018. We do not believe this approach is mandated by the appellate court decision; rather, we believe this is the most equitable approach given our state of information at this time and the guidance we have received from the appellate court. Metropolitan's Board may very well adopt an approach to these issues other than staff's recommendation.

If you have any questions, please feel free to call me.

Sincerely,



Jeffrey Kightlinger
General Manager

cc: Metropolitan Board of Directors
San Diego County Water Authority Board of Directors



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

VIA EMAIL

November 22, 2016

Director Michael T. Hogan
Director Keith Lewinger
Director Elsa Saxod
Director Fern Steiner
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated November 4, 2016 regarding November Board Meeting Board Memo 9-2 - Compliance with Fund Requirements and Bond Indenture Provisions.

This letter addresses your comments, received November 4, 2016, on November Board Meeting Board Memo 9-2 - Compliance with Fund Requirements and Bond Indenture Provisions.

Pursuant to the annual reporting requirement contained in Section 5204 of the Metropolitan Water District Administrative Code, entitled "Compliance with Fund Requirements and Bond Indenture Provisions," the General Manager reviewed the minimum fund requirements outlined in Chapter 5 of the Administrative Code and determined that those requirements had been met and that the District had complied with the provisions of the articles and covenants contained in the resolutions of issuance for all outstanding District bond issues during the preceding fiscal year. The General Manager and Chief Financial Officer reported the results of this review to the Board in Information Item 9-2, dated November 8, 2016. In your letter, you assert that there are discrepancies between MWD Act Section 134 and Administrative Code Section 4301(a) and between MWD Act Section 124.5 and Administrative Code Section 4301(b). You also assert that the discrepancy between MWD Act Section 134 and Administrative Code Section 4301(a) should have been addressed before compliance was certified.

Comment that Administrative Code Section 4301(a) must be amended because it is inconsistent with and does not accurately describe the statutory limitations of Section 134 of the MWD Act.

Administrative Code Section 4301(a) and MWD Act Section 134 are not inconsistent. Your interpretation of Section 134 is not reasonable because it would either read Metropolitan's authority to levy ad valorem taxes out of the Act or it would lead to the interpretation that Metropolitan is required to fix rates at levels that ignore the amount collected by the ad valorem taxes and other revenues received.

Pursuant to Section 124 of the MWD Act, Metropolitan is authorized to "levy and collect taxes on all property within the district for the purposes of carrying on the operations and paying the obligations of the district" Section 124.5 of the MWD Act further expressly clarifies Metropolitan's authority to levy ad valorem taxes to pay, among other expenses, "(1) the principal and interest on general obligation bonded indebtedness of the district and (2) that portion of the district's payment obligation under a water service contract with the state which is reasonably allocable, as determined by the district, to the payment by the state of principal and interest on bonds issued pursuant to the California Water Resources Development Bond Act as of the effective date of this section and used to finance construction of facilities for the benefit of the district." Thus, your interpretation that Administrative Code Section 4301(a) must be limited to the authority in Section 134 is incorrect.

Furthermore, Metropolitan does take in revenues other than water sales revenues and water standby or availability service charges or assessments. For example, the District receives grants and earns income on investments. Administrative Code Section 4301(a) recognizes that rates and charges should reflect Metropolitan's ad valorem tax revenues and any additional revenue sources of Metropolitan so that overall revenues are sufficient to pay the costs of providing Metropolitan's service.

Because there is not a discrepancy between Administrative Code Section 4301(a) and MWD Act Section 134, there was no reason for the General Manager not to certify the results.

Comment that Administrative Code Section 4301(b) contains language that is outdated and has no meaning separate and apart from the statutory limitations in Section 124.5 of the MWD Act; accordingly, this language should be deleted.

As you note, Administrative Code Section 4301(b) references a board policy to set the amounts raised by ad valorem property taxation at "not less than the approximate equivalent of the amounts levied for fiscal year 1990-91." However, Section 4301(b) expressly subjects that policy to the limitations of Section 124.5 of the MWD Act. Metropolitan complies with Section 124.5. Therefore, there was no need to change the Administrative Code in connection with the compliance determinations of the General Manager pursuant to Administrative Code

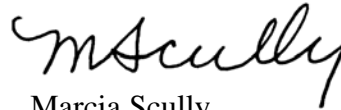
SDCWA Directors
Page 3
November 22, 2016

Section 5204. Staff regularly reviews and recommends appropriate amendments of the Administrative Code to the Board, and will review Section 4301(b) as part of that process.

Sincerely,



Gary Breaux
Assistant General Manager/
Chief Financial Officer



Marcia Scully
General Counsel

cc: Jeffrey Kightlinger, General Manager
MWD Board Members
SDCWA Board of Directors and Member Agencies



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

Date: April 12, 2016

To: Board of Directors

From: Marcia Scully, General Counsel
Gary Breaux, Assistant General Manager/Chief Financial Officer

Subject: Response to SDCWA Reports on "San Diego County Water Authority Metropolitan Water District Cost of Service Rate Review" and "Metropolitan Water District of Southern California Water Supply Assessment and Use Among its 26 Member Agency Customers"

At the Finance & Insurance Committee meeting on April 11, 2016, the San Diego County Water Authority (SDCWA) provided two reports to Metropolitan Board Executive Secretary, Dawn Chin: 1) "San Diego County Water Authority Metropolitan Water District Cost of Service Rate Review" (MFSG Report), and 2) "Metropolitan Water District of Southern California Water Supply Assessment and Use Among its 26 Member Agency Customers" (Stratecon Report). The reports purport to undertake a review of the proposed rates and charges for calendar years 2017 and 2018 the Metropolitan Board is set to consider on April 12, 2016.

The reports contain a number of factual and legal misrepresentations which are too numerous to evaluate and report on within a 24-hour timeframe. Thus, we identify in this letter only some of the most egregious misrepresentations and fundamental misunderstandings. Moreover, we note that the reports do not provide any of the qualifications or experience of the authors or firms and their ability to opine on the topics each presents. In fact, the MFSG Report fails to identify *any* author. The MFSG Report simply states it was "developed by" the Municipal & Financial Service Group, which is located in Annapolis, Maryland. However, it fails to establish any knowledge or experience related to the legal requirements specific to California and those relating specifically to wholesale water agencies. Indeed, the *lack* of knowledge, or at least the misguided application, of those legal requirements is demonstrated throughout the MFSG Report. Lack of knowledge of applicable legal requirements is also evident in the Stratecon Report. Its author, Rodney Smith, has no relevant expertise concerning wholesale water rate-setting based on the information on his company website (see attached).

The MFSG Report Inappropriately Applies Retail Concepts from the M1 Manual to Metropolitan, Resulting in Application of the Wrong "Industry Standards"

One of the major flaws underlying the MFSG Report's erroneous conclusions is its failure, and the unknown author's apparent refusal, to distinguish between retail water utilities and wholesale water utilities when it purports to apply the American Water Works Association's (AWWA) M1 manual, Principles of Water Rates, Fees and Charges, Sixth Edition (the M1 Manual).

Metropolitan's Cost of Service Report follows the guidelines and principles of the M1 Manual. As Metropolitan noted in its Cost of Service Report, "[T]he majority of the M1 Sixth Edition is written for utilities providing retail service or combined retail and wholesale service. The distinction in practices for wholesale-only utilities is indirect; care must be taken to be attuned to these distinctions such that the guidelines are not incorrectly applied or misrepresented."

As explained by Rick Giardina, current Chair of the American Water Works Association (AWWA) Rates and Charges Committee, in a separate letter, the MFSG Report does not account for the significant distinctions between the services provided by Metropolitan, as a wholesaler, and the services a water retailer provides to parcels of property. The Report claims to apply an "Industry Standard Cost-of-service-Methodology," but the industry it focuses on is the retail water industry.

The Reports are Based on a Fundamental Misunderstanding and Misapplication of California Law

The MFSG Report states that Proposition 26 requires three things of a public agency in rate-setting. (MFSG Report, p. 13.) It states that Proposition 26 provides that:

1. Revenues cannot exceed the costs required to provide the service.
2. Revenues cannot be used for any other purpose than to recover the costs related to the service provided.
3. Amount of any fee cannot exceed the proportional cost of the service attributable to a customer.

The first problem with MFSG's representation is that it states the requirements of Proposition 218 – not Proposition 26. The requirements of Proposition 218 summarized by MFSG are found at Article XIII D of the California Constitution and apply to property-related fees, charges, and assessments, such as retail water rates imposed on parcels of property – not wholesale water service rates. Article XIII D, Section 6(b), added by Proposition 218, provides that:

- (1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.
- (2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- (3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.

(Cal. Const., art. XIII D, §6, subd. (b)(1)-(3).)

The provisions Proposition 26 added to the California Constitution, on the other hand, are found at Article XIII C, section (1)(e). There, the voters added a new definition of special taxes, which makes "any levy, charge, or exaction of any kind imposed by a local government" a "tax," unless exempted. (Cal. Const., art. XIII C, §1, subd. (e).) Whether Proposition 26 applies to Metropolitan's rates and charges is an issue in the pending appeal in the *SDCWA v. Metropolitan*

litigation. Metropolitan contends Proposition 26 does not apply to its rates and charges and, even if it did, the rates and charges would be exempt as user fees or charges pursuant to each of the following exemptions:

- (e)(1) A charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege.
- (e)(2) A charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of providing the service or product.
- (e)(4) A charge imposed for entrance to or use of local government property, or the purchase, rental, or lease of local government property.

(Cal. Const., art. XIII C, §1, subd. (e)(1), (2), and (4).)

As the language of each exemption demonstrates, user fees for government services or benefits are subject only to a reasonableness standard, and charges for use, purchase, rental, or lease of local government property are not limited by any such standard. (*Id.*) “Reasonableness ... is the beginning and end of the judicial inquiry” and courts will not overturn a water rate if there is a reasonable basis such as the “cost of service or some other reasonable basis.” (*Hansen v. City of San Buenaventura*, 42 Cal. 3d 1172, 1180-81 (1986).) The California Supreme Court has clearly held that whether the agency’s costs to provide a government service or benefit is reasonable is measured on a collective basis – not based on the extremely segmented and particularized classes proposed by either MFSG or Stratecon. (*See California Farm Bureau Fed’n v. State Water Res. Control Bd.*, 51 Cal. 4th 421 (2011).) That was the measure of reasonableness for user fees before Proposition 26 and remains the measure of reasonableness today.

In *Rincon Del Diablo Mun. Water Dist. v. SDCWA*, for example, the California Court of Appeal held that SDCWA’s transportation rates did not exceed the estimated reasonable cost of providing the service, because they did not exceed SDCWA’s collective transportation costs, and the Court further rejected the argument that charges must be based “on the costs attributable to [each agency’s] specific burden on the system.” (*Rincon Del Diablo, supra*, 121 Cal. App. 4th 813 (2004).) The Court in *Rincon* evaluated language that is identical to the user fees exemptions in Proposition 26 at (e)(1) and (e)(2). (*Id.* [evaluating Cal. Gov. Code § 66013, stating fees or charges “shall not exceed the estimated reasonable cost of providing the service for which the fee or charge is imposed.”]; *see also Schmeer v. Cnty. of Los Angeles*, 213 Cal. App. 4th 1310, 1316 (2013) [Proposition 26 exempts regulatory fees based on language “nearly verbatim” to the test applied before its adoption].) Thus, just as the SDCWA rates were subject to a collective reasonableness test, so too are Metropolitan’s rates and charges.

The Stratecon Report is similarly flawed based on its unsupported assumption that Metropolitan’s rates and charges are subject to a “proportional” allocation requirement and that such requirement mandates multiple classes of customers. (Stratecon Report, p. 12.)

Proportionality is a requirement only in Proposition 218 for parcel-specific charges, which might explain MSFG's misrepresentation that the Proposition 218 requirements are in fact those of Proposition 26. They are not. There is no language in the provisions of Proposition 26 or case law that requires proportionality for rates or charges subject to Proposition 26.

The Stratecon Report's reference to the "*San Juan Capistrano*" decision, as it is interpreted in an article, is irrelevant as that case analyzes only Proposition 218 in the retail rates context – not Proposition 26 in the wholesale rates context. (See Stratecon Report, p. 12; see also *Capistrano Taxpayers Ass'n v. City of San Juan Capistrano*, 235 Cal. App. 4th 1493 (2000).) Notably, even in the Proposition 218 analysis found in *San Juan Capistrano*, the Court refused to break down a water service into segmented parts to determine whether a cost of one project was proportional to a parcel. Indeed, Proposition 218 case law establishes that even in that context – the "proportionality" requirement context – courts must consider a public agency's holistic costs when reviewing that agency's cost of service determinations. (See *San Juan Capistrano*, *supra*, 235 Cal. App. 4th at 1502; see also *Morgan v. Imperial Irrigation Dist.*, 223 Cal. App. 4th 892, 918 (2014); and see *Moore v. City of Lemon Grove*, 237 Cal. App. 4th 363 (2015).)

The MFSG Report Misstates and Mischaracterizes Metropolitan's Costs for the State Water Project as Purchased Water Costs

As Metropolitan's Cost of Service Report clearly explains at pages 11-13 and 50-53, and throughout the Report, none of Metropolitan's State Water Contract obligations and use of the State Water Project (SWP) to transport water are characteristic of a "purchased water cost." The MFSG Report contradicts Metropolitan's analysis and conclusions based solely on its fundamental misunderstanding of the State Water Contract, as well as the charges pursuant to that Contract.

The MFSG Report erroneously concludes that the "cost of moving water through the SWP for delivery to MWD is included in the SWP supply costs." (MFSG Report, p. 10.) They are not. DWR invoices Metropolitan for, and Metropolitan pays DWR, the transportation-related costs separately from the supply costs. The power required to move water through the SWP for delivery to Metropolitan also is not included in the SWP supply costs; it is included separately through the Transportation Variable and the OAPF charges. Knowledge of the basic concepts of Metropolitan's participation in the State Water Project system is necessary to review Metropolitan's SWP costs and the MFSG Report fails to establish such knowledge.

The MFSG Report Mischaracterizes the Ad Valorem Tax Revenues as a Cost-of-Service Issue

The MFSG Report attempts to suggest that the determination to suspend Section 124.5 of the Metropolitan Water District Act is a cost-of-service issue. The suspension of the tax rate limit in Section 124.5 has no effect on the level or functionalization of Metropolitan's costs, as projected costs and revenue offsets are handled separately in the cost-of-service analysis. Ad Valorem Tax revenues can only be used for two purposes: to pay Metropolitan's General Obligation debt service and to pay State Water Contract capital costs.

The MFSG Report Mischaracterizes Metropolitan's Budgeting and Financial Reporting Obligations

The MFSG Report suggests that Metropolitan's budget document should conform to its financial statements. (MFSG Report, p. 5.) However, consistent with the M1 Manual and the general practice of government-owned utilities, Metropolitan uses a "forward looking" or prospective rate period as the test year for rate-setting, as a prospective period accommodates the impact of rapidly increasing and changing costs on rates. Metropolitan follows this practice by incorporating budget information for the proposed biennial budget expenditures in its revenue requirement. This ensures that Metropolitan's budget and its rates and charges are supported by the same information.

Metropolitan's financial statements are prepared in accordance with Generally Accepted Accounting Principles, which do not dictate governmental budgeting or rate-setting. Metropolitan's financial statements report information that has already occurred, based on accrual accounting, which may or may not be relevant to the prospective budget and rate-setting period in question.

Further, the MFSG Report suggests that Metropolitan is required to maintain balancing accounts or "true-ups" at the end of revenue periods. It points to the State Water Contract and the California Public Utilities Code as examples. Neither places such a requirement on Metropolitan. As in other places, the MFSG Report mischaracterizes the State Water Contract. The State Water Contract is a take-or-pay cost recovery agreement; Metropolitan must pay its allocated share of State Water Contract costs whether Metropolitan receives any water at all. The State Water Contract can recover only those costs attributable to Metropolitan and not costs attributable to other Contractors or the State of California General Fund.

Similarly, the MFSG report misunderstands the relationship between public agencies and the California Public Utilities Commission. Metropolitan is not regulated by the California Public Utilities Commission or Code. The MFSG Report suggests that "industry best practices" dictate that Metropolitan "true-up" its costs at the end of the budget cycle similar to regulated private utilities. (MFSG Report, p. 15.) However, there is no such "industry best practice." True-ups are not a common governmental utility practice and not widely used by wholesale utilities.



Marcia Scully
General Counsel



Gary Breaux
Assistant General Manager/
Chief Financial Officer

cc: Jeffrey Kightlinger

Attachment

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Stratecon Inc. has partnered with World Water Institute (“WWI”) to provide support for curriculum development and student and faculty research that seeks to find solutions to the world’s most pressing

water challenges. Stratecon President and WWI Board Member Rodney T. Smith said, “With WWI’s focus on using market mechanisms to solve water resource management problems, [...]

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About Us

Stratecon Inc. is a strategic planning and economics consulting firm specializing in water. We provide advisory services in the acquisition of water rights throughout the western United States and in the sale and leasing of water rights and water supplies to public and private sector water users, as well as provide proprietary research services, and expert testimony. Stratecon brings together the disciplines of economics, finance, natural resource management and law to develop innovative solutions to commercial and public water policy issues.

Stratecon also produces Journal of Water, Hydrowonk Blog and Stratecon Water Policy Marketplace:

Journal of Water is a paid subscription journal reporting on the important, path-breaking and innovative developments in water resources in the Colorado River Basin, Texas and elsewhere in the Southwest.

Hydrowonk Blog is an open intellectual marketplace for the water industry... a forum to exchange information and perspectives. Stratecon invites you to join in the conversation at Hydrowonk.com and click on Hydrowonk Blog.

Stratecon Water Policy Markets was developed as the platform for our prediction markets. Thousands of prediction markets have been used by the public and private sector to improve planning and decision-making. We believe it's time for the water industry to embrace the potential power in the collective wisdom of prediction markets. We invite you to join the crowd in our new venture and make your predictions, as we address pressing future events confronting the water industry. Your participation is free. Visit Hydrowonk.com and click Stratecon Water Policy Marketplace.

[Contact us](#)

Our Team

▼ [Rodney T. Smith, Ph.D.](#)

Rodney T. Smith is President of Stratecon Inc., an economics and strategic planning consulting firm specializing in the economics, finance, law, and politics of water resources. He was also manager of a water rights fund in 2005 for DB Zwirn, lead a water rights and infrastructure project for investors

through Southwest Texas Water Resources, L.P. and currently serves as President of Baja Norte Water Resources LLC and an affiliated Mexican entity involving the marketing of desalinated Mexican seawater in the United States. Rod is also currently involved in the early stage, start-up of a water company in Texas.

Rod is involved as an advisor in the acquisition of water rights throughout the western United States and in the sale and leasing of water rights and water supplies to public and private sector water users. He has consulted extensively for public and private sector clients, including high net worth investors, on business and public policy issues concerning water resources. Recently, Rod served as a consultant to a major new water transfer study by the Western Governors’ Association and the Western States Water Council.

Rod received his Ph.D. in Economics from the University of Chicago and a Bachelor of Arts in Economics from the University of California at Los Angeles.

[▶ Michael D. Smith, Vice-President, Finance](#)

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April 12, 2016

Mr. Gary Breaux
Assistant General Manager/Chief Financial Officer
Metropolitan Water District of Southern California
700 N Alameda St
Los Angeles, CA 90012-2944

Subject: San Diego County Water Authority – MFSG Report

Dear Mr. Breaux:

On behalf of Raftelis Financial Consultants, Inc. (RFC) I am pleased to provide this response to the *San Diego County Water Authority Metropolitan Water District Cost-of-Service Rate Review* dated April 10, 2016 (the MFSG Report). I only received a copy of this report on April 11, 2016 after the Metropolitan Water District of Southern California (Metropolitan) Finance & Insurance Committee meeting that morning and have had less than 24 hours to review the document and prepare this letter. Given this limited timeframe, my focus is on key misrepresentations made in the MFSG Report regarding the American Water Works Association's (AWWA) M1 manual Principles of Water Rates, Fees, and Charges (the M1), and other mischaracterizations relating to cost of service methods and practices.

My response, this letter, is not what I would represent as a "complete response". To the contrary, if more time were available, it is likely that I would have additional comments on and issues with the MFSG Report. A second report by Stratecon Inc., was also provided by the San Diego County Water Authority (the Authority) at the Finance & Insurance Committee meeting yesterday. I have not completed a thorough review the Stratecon Inc. Report and like the MFSG Report, I believe that if such a review were completed, it is probable that I would have substantive comments on that report as well.

By way of reference, I have over 37 years of utility finance and cost of service experience. Most recently I served as the Vice Chair of the AWWA Rates and Charges Committee and in that capacity I was the Chair of the working group that produced the Sixth Edition of the M1 (published in 2012). Currently, I am Chair of the Rates and Charges Committee and am overseeing the preparation of the Seventh Edition of the M1 which is expected to be published later this year or in 2017. My resume is included as Attachment A to this letter.

The M1 Manual, Metropolitan's Cost of Service Process and System

On March 16, 2016 Metropolitan provided to the Board and the public in general, its cost of service report for Fiscal Years (FY) 2016/17 and 2017/18. In this report titled: Cost of Service for Proposed Water Rates and Charges (Cost of Service report), Metropolitan sets forth that the cost of service (COS) process, analysis and results follow the guidelines and principles of the M1 manual. It is this report that is the subject of review documented in the MFSG Report. I have reviewed the Metropolitan Cost of Service report and data output of the Metropolitan financial planning model for the fiscal years previously noted and, in my opinion, agree that the COS process used by Metropolitan conforms to the guidelines and principles articulated in the M1.

While the COS process used by Metropolitan is not a “mirror image” (nor should it be) of the example and/or process illustrated in M1, the end result is the determination of the unit COS for the services provided to the Member Agencies and effectively functions as the COS to serve each Member Agency. The M1 manual was never intended to be a “cook book”, to be blindly followed by utilities in the development of rates and charges for service. To the contrary, M1 is a compilation and discussion of guidelines and alternatives for consideration and use by utilities. The actual COS methodology for any utility should be a reflection of its own service area, customer base, objectives, etc. applied within the broad principles contained within the M1 and the process used by Metropolitan, in my opinion, achieves just that.

Metropolitan recognizes the need to incorporate the major tenants of M1 regarding reasonableness, fairness, and equity, i.e., COS, but also the need, the importance, to tailor the COS process to its own unique situation. This is a practice common in the industry – to adjust the process to reflect the characteristics of the utility. Metropolitan recognizes this as evidenced from a footnote on page 32 of the Metropolitan Cost of Service report:

“The majority of the M1 Sixth Edition is written for utilities providing retail service or combined retail and wholesale service. The distinction in practices for wholesale-only utilities is indirect; care must be taken to be attuned to these distinctions such that the guidelines are not incorrectly applied or misrepresented.”

The M1 manual is not a cookbook to be followed verbatim from cover to cover. Rather it is a compendium of guidelines, concepts and options for consideration in the development of cost-based rates. In this context, it is understood, if not encouraged by M1 manual, that each utility should use these concepts to inform and develop rates and charges reflective of the unique circumstances in which the utility operates.

The passages that follow are from the Sixth Edition of the M1 and further reinforce this point of view.

M1 page xix:

“The AWWA Rates and Charges Committee believes that a utility's full revenue requirements should be equitably recovered from classes of customers in proportion to the cost of serving those customers. However, the committee also recognizes that other considerations may, at times, be equally important in determining rates and charges and may better reflect emerging objectives of the utility of the community it serves...”

Also on page xix of the M1:

“This manual is intended to help policymakers, managers, and rate analysts consider all relevant factors when evaluating and selecting rates, charges and pricing policies. It is a comprehensive collection of discussions and guidance on a variety of issues associated with designing and developing water rates and charges.”

And on Page 5 of the M1:

“In establishing cost-based water rates, it is important to understand that a cost-of-service methodology does not prescribe a single approach. Rather, as the First Edition of the M1 manual noted, ‘the (M1 manual) is aimed at outlining the basic elements involved in water rates and suggesting alternative rules of procedure for formulating rates, thus permitting the exercise of judgment and preference to meet local conditions and requirements.’...a utility may create cost-based rates that reflect the distinct and unique characteristics of that utility and the values of the community.”

And as previously noted in this letter and by Metropolitan on page 32 of the Cost of Service report, the M1 manual clearly has a focus on retail water utility providers and it is important to understand and recognize the practices and circumstances under which wholesale providers operate so as to not inappropriately apply concepts or guidelines as discussed within M1 that are more appropriate to the retail situation.

In the balance of this letter I will react and respond to a number of comments and findings from the MFSG Report.

1. The MFSG Report suggests “typical functions (cost elements)” to which the revenue requirement is allocated (MFSG Report pages 5-6).

The listed functions are those one would expect to use for a retail utility. The MFSG Report is following the M1 Manual as if it were a cookbook, and in doing so ignores the need to tailor the COS process to the utility (as articulated in the M1 – see the earlier excerpts from M1) and the unique service functions Metropolitan provides and which are reflected in Metropolitan’s COS Methodology, as described on pages 34-35 of the Cost of Service report. As the Cost of Service report states, “These functional assignments reflect the unique services that Metropolitan provides” (page 35 of the Cost of Service Report).

2. The MFSG Report continues the misapplication of retail concepts on page 6 with its “basic flow chart” of the rate setting process.

The process illustrated, again, is one that in general applies to retail agencies and more importantly is a generic representation of the rate setting process. As used in M1 (see pages 4 and 5) this type of flow chart is but one example of the previous point I make regarding how M1 encourages utilities to *tailor the application* of M1 principles to the utility’s unique set of circumstances, goals, service requirements, etc.

For Metropolitan, the typical process illustrated in the MFSG Report (page 6) stops with the Cost of Service allocations. At this point, there is no need to establish classes of customers as is typical in a retail COS process. Metropolitan has identified service function costs to meet

average demands and calculates unit costs, or volumetric rates, to recover these costs. Metropolitan has also identified costs to be recovered through the Readiness-to-Service Charge (emergency and available capacity), the Capacity Charge (distribution capital investments to meet seasonal peak member agency needs) and costs associated with treated water service and then developed the corresponding rate(s).

The Cost of Service is the nexus between Metropolitan's expenditures and its rates and charges as Member Agencies pay for what they use; the service they need – full service treated water, full service untreated water and wheeling. Furthermore, Member Agencies have unique usage characteristics that are captured in the Metropolitan rates and charges relating to treatment, peak use on the Metropolitan system, the need for emergency and available capacity, or average use. For this reason it is not necessary to group Member Agencies into traditional customer classes as would be done in a typical retail rate setting process. The end result of the Metropolitan process is the determination of the cost of each service available to a Member Agency and to the extent the Member Agency uses that service, an amount, a rate or charge, is paid by the Member Agency that is reflective of the cost of that service.

3. The MFSG Report continues with the misapplication on page 9 by using a retail definition of “standby service”.

Metropolitan's Cost of Service Report clearly addresses the unique function Metropolitan provides by creating a Fixed Standby cost allocation category. As explained on pages 73-74 of the Cost of Service report, Metropolitan ensures regional reliability during emergencies, loss of local supplies, changed economic conditions, and hydrologic variability, as well as providing available capacity to move water during a wide range of Member Agency demands that far exceed the range of responsibilities and variability experienced by retail agencies. This unique obligation necessitates an approach that is not a standard retail definition and again the MFSG Report fails to recognize, in this case, the service or relationship between Metropolitan and the Member Agencies.

4. The MFSG Report states that using Net Book Value of assets to functionalize capital financing costs is “inappropriate” (pages 10-11); it is quite appropriate and widely used by utilities.

The M1 Manual describes this very method as an acceptable approach to the allocation of capital financing costs, i.e., using Net Book Value to functionalize capital financing costs is consistent with cost-of-service standards. The MFSG Report provides an example of how this approach seemingly allocates debt service (inappropriately per the MFSG Report) to various functional categories and completely ignores the underlying premise for using this approach: the reality that the decision to issue debt for one functional category versus another is/can be a relatively subjective decision and this determination is mitigated through the use of the Net Book Value method described in M1.

5. The MFSG Report criticizes the use of an historical base period for a treatment charge alternative, which is a common wholesale rate practice.

This criticism of the use of a base period of 1998-2007 and determination of a “Test Year” (pages 15 and 16 of the MFSG report) for allocating treatment costs fails to recognize a common rate-making practice as well as a wholesale rate practice relating to the use of historic periods and associated data in the rate determination process and the application of take-or-pay rate mechanisms or minimum usage levels by wholesale providers across the country. The MFSG Report states that “...the ‘Test Year’ for any rate setting process must reflect one of two things: the most recently available actual data (current year) or the most reasonably projected data for the next year.” (MFSG report page 16). This ignores that fact that historical data is regularly, justifiably and routinely used in the cost of service process by wholesale entities; and for that matter retail utilities as well.

And in this case, i.e., the Metropolitan COS and proposed treated water fixed charge, the use of this 1998-2007 base period is appropriate and provides the link or nexus between the capital and debt service costs existing today and the capacity related to those costs or investments; a link that the Stratecon Inc. Report states is essential for “Justifiable water rates...” that must be based on “...how their [Member Agencies] demands are driving investments and operational decisions.” (Stratecon Inc. Report page 18). The Member Agency demands during the stated base period drove the capacity investments at that time and are still very much linked to the treated water capital investments (i.e., costs) that have been made over the last decade.

It is interesting to note the apparent inconsistency or conflicting positions articulated by the MFSG Report and Stratecon Inc. Report regarding the use of current or future data. The MFSG Report advocates for the use of “...actual data (current year) or the most reasonably projected data for the next year.” (MFSG Report page 16), while the Stratecon Inc. Report supports the use of future year data: “For cost of service purposes (as well as investment), reasonably projected future circumstances are more relevant than current circumstances” (Stratecon Inc. Report page 17).

We appreciate this opportunity to again be of service to you and your organization. Please contact me with any questions regarding this letter. I can be reached at 303.305.1136 and my email is rgiardina@raftelis.com.

Sincerely,

RAFTELIS FINANCIAL CONSULTANTS, INC.



Richard D. Giardina, CPA
Executive Vice President

Attachment A – R. Giardina resume

This blank page is used to facilitate two-sided printing

ATTACHMENT A

R. Giardina - Resume

RICHARD D. GIARDINA

EXECUTIVE VICE PRESIDENT

Raftelis Financial Consultants, Inc.

Mr. Giardina is an Executive Vice President with Raftelis Financial Consultants, Inc. and while serving in a national role, also leads the Rocky Mountain region business practice. His extensive managerial and financial experience includes over 350 financial studies serving both the private and public sector. His experience covers technical areas and industries such as municipal fee development, utility cost-of-service and rate structure studies, litigation support, economic feasibility analyses, privatization feasibility and implementation studies, impact fee studies, management and operational audits, reviews of policies and procedures and operating practices, mergers and acquisitions, valuation services, and rate filing and reporting. He has also served as an arbitrator for several wholesale rate disputes.

As a member of several industry associations, he has also developed industry guidelines regarding financial and ratemaking practices. In particular, as a long-standing member of the American Water Works Association (AWWA) Rates and Charges Committee (currently the chair of the Committee), he chaired one group that prepared the first edition of the Small System Rate Manual (M54) and another that re-wrote the Water Utility Capital Financing Manual. He also chaired the re-write of M1 – Principles of Water Rates, Fees, and Charges (the Sixth Edition was published in June of 2012) and as chair he is currently overseeing the production of the Seventh Edition of M1. He was also a contributing author to the Water Environment Federation Finances and Charges Manual. Mr. Giardina also organized and led a WEF-sponsored seminars in 2010 and 2011 titled "Weathering the Storm: Is This the Right Time for You to Form a Stormwater Utility?"; a seminar on the opportunities and challenges surrounding the creation of a stormwater utility. In 2011 he was appointed to the EPA Environmental Financial Advisory Board and today, continues to serve on the Board.



YEARS OF EXPERIENCE

- 37 years

EDUCATION

- BA Business Administration Western State College of Colorado 1978

LICENSES AND CERTIFICATIONS

- Certified Public Accountant

SPECIAL RECOGNITION

- Appointed to the EPA Environmental Financial Advisory Board, 2011-present
- Rates and Charges Committee, American Water Works Association, member 1999 to present, Chair 2014 to present
- Financing and Charges Task Force, Water Environment Federation
- Utility Management Conference, AWWA-WEF, past co-chair and organizing committee, 2005 to 2010
- Water For People, Annual Fund Raising Event, Organizing Committee, 2006 to 2012
- Conference President, National Impact Fee Roundtable (now known as the Growth and Infrastructure Consortium), 2005
- Board Member, East Cherry Creek Valley Water & Sanitation District, 2001-2002

SOCIETIES

- American Institute of Certified Public Accountants
- American Water Works Association
- Government Financial Officers Association
- Water Environment Federation

EMPLOYMENT HISTORY

- Raftelis Financial Consultants, Inc., 1993 to 1995, 2013 to present
- Malcolm Pirnie-Arcadis-US, 2004 to 2013
- Rick Giardina & Associates, Inc. 1995 to 2004
- Ernst & Young 1984 to 1993
- Stone & Webster, Inc. 1981 to 1984
- State of Colorado Public Utilities Commission 1978 to 1981

LITIGATION / RATE CASE EXPERIENCE

- » Mr. Giardina provided expert testimony in PUC Docket No. 42857, SOAH Docket No. 473-14-5138 in support of Austin Water in a matter brought by four of its wholesale customers. The wholesale customers raised numerous concerns including the allocation of costs between water, wastewater and recycled operations, financial plan preparation, revenue requirements, cost-of-service and rate design. His testimony addressed issues around industry practices and the equitable assignment of costs between retail and wholesale customer groups.
- » Mr. Giardina prepared an expert report and provided expert witness testimony in support of the City of Westlake, Ohio in Case No. CV-12-782910 in the State of Ohio, County of Cuyahoga, against the City of Cleveland, Ohio. Consistent with the terms of its agreement, Westlake discontinued receiving wholesale water service from Cleveland and in turn Cleveland sought to recover “stranded costs” from Westlake. Mr. Giardina prepared an expert report and provided expert testimony at trial refuting Cleveland’s claims on the grounds that among other things, Cleveland had been fully compensated for all investment costs and no monies were due as a result of Westlake’s decision to exercise its contract rights to no longer be a Cleveland wholesale water customer. He used Cleveland’s own rate study and cost of service methodology to illustrate his conclusions including how under Cleveland’s utility approach to defining revenue requirements and determining rates, Cleveland’s claims were without merit.
- » Mr. Giardina served as an expert witness in support of the El Paso Water Utilities, Public Service Board (EPWU) in a lawsuit brought by the El Paso Apartment Users Association challenging the newly implemented EPWU stormwater user fees. In addition to preparing pre-filed testimony, being deposed and providing expert witness testimony at trial, Mr. Giardina assisted legal counsel for the EPWU in the deposition of the Association’s expert witness. The issues addressed by Mr. Giardina included the determination of billing units, financial plan preparation, revenue requirements, cost-of-service and rate design. The Court ruled in favor of the EPWU on all counts.
- » For the City of Chandler, Arizona Mr. Giardina served as Project Director in completing an outside city cost of service study. For a number of years the City had charged outside city water customers at twice the inside City rates. The rate differential was repealed when outside city customers sought to litigate this policy. The City retained Mr. Giardina to complete a cost of service study and recommend, if warranted, an outside rate differential. The approach used included the identification of assets serving strictly outside customers and development of an allocation methodology for common facilities. The City’s cash revenue requirements were converted to the utility basis for the purposes of determining the cost of outside service. Included in the cost of service was a return component based on the net rate base serving outside customers. Results of this analysis indicated that a differential was justified. The precise differential varied from 1.80 to 2.01 times inside city rates based on a variety of factors including the assignment or allocation of utility assets and the inclusion of contributed property. An automated rate model was delivered to the City and staff training was completed.
- » In a wholesale rate dispute between Bay City (as the supplier) and Bay County (and other municipal customers) Mr. Giardina was selected and served as the independent, third arbitrator. The rate consultant for each party served on the arbitration panel with Mr. Giardina. As the independent arbitrator Mr. Giardina presided over the hearing and drafted the arbitration decision (with input and comment from the other panel members).
- » Mr. Giardina was retained to participate on a three-member arbitration panel in a wholesale rate dispute between the cities of Kalamazoo and Portage, Michigan, in an attempt to avoid litigation. The panel received

testimony, reviewed briefs and related materials and led a consensus building process culminating in a settlement agreement.

- » Mr. Giardina was retained to participate on a three-member arbitration panel in a capital recovery fee dispute between the cities of Holland and Zeeland, Michigan. The panel received testimony, reviewed briefs and related documents and rendered a written, binding opinion.
- » Mr. Giardina provided consulting services to legal counsel of a homeowners association regarding water rates charged by a large municipally-owned water utility. At issue was the association's designated customer classification and the rates charged for service. The association was served through a single master meter and was responsible for the initial investment and all on-going costs associated with all facilities on their side of the metering point. This included meter reading and billing (under the association's rate structure) activities for their own retail customers. Mr. Giardina completed a comprehensive review of the utility's rate ordinance regarding customer class designations. He also evaluated a utility-prepared analysis on the cost of serving the association. His recommendations included the re-classification of the association from residential to a special "non-retail" service category or the utility's wholesale class and a rate for service reflective of the cost incurred by the utility and the service provided by the association.
- » Mr. Giardina provided litigation support on a contract rate dispute for one of the largest cities in the United States. For this case, the city was in litigation with ten wastewater contracting agencies (wholesale customers) who disagreed with the manner in which their rates were calculated and implemented. Mr. Giardina assisted this west coast city in evaluating the appropriateness of using settlement amounts for general fund purposes. This included a comprehensive analysis of the city charter and code, EPA and state wastewater grant and user charge regulations, bond ordinances and covenants and governmental accounting and reporting literature.
- » Mr. Giardina conducted an outside city cost of service study for the City of Prescott, Arizona. In anticipation of litigation the City retained Mr. Giardina to complete a cost of service study and recommend, if warranted, an outside rate differential. The approach used included the identification of assets serving strictly outside customers and development of an allocation methodology for common facilities. The City's cash revenue requirements were converted to the utility basis for the purpose of determining the cost of outside service. Included in the cost of service was a return component based on the net rate base serving outside customers.
- » Mr. Giardina served as Project Manager on an engagement to provide litigation support services in a lawsuit involving the recovery of closure and post-closure costs associated with a California landfill and transfer station. Mr. Giardina was retained by counsel for the plaintiff, the landfill and transfer owner, to provide expert witness testimony relating to the process used to establish rates for the owner and to also estimate damages resulting from the regulator's disallowance of closure and post-closure costs. Mr. Giardina also assisted in the depositions of the defendant's experts and assisted plaintiff's counsel on the development of closure and post-closure litigation strategies.
- » Mr. Giardina served as Project Manager on an engagement for the Colorado Ute Water District to evaluate (as part of a law suit between the District and the City of Grand Junction) the financial impact if the City were to assume utility service to approximately 20% of the District's service territory. He also assisted legal counsel in preparing deposition questions and trial material.

- » Mr. Giardina served as an expert witness in Colorado Water Court. Mr. Giardina was retained to evaluate the feasibility of a proposed water supply project. The evaluation included a comprehensive review of work completed by witnesses for the defendant, and the development of independent technical analysis relating to the project feasibility. He assisted legal counsel in deposing other experts and was deposed by defendants outside counsel.
- » Mr. Giardina served as an expert witness on an engagement to provide litigation support services to the City of Thornton, Colorado. Suit was filed in Adams County District Court against the City asserting that the City violated its agreement with outside City water and sewer customers calling for non-discriminatory rates. Mr. Giardina assisted the City's outside legal counsel in preparing requests for discovery and deposition of plaintiff's witnesses and the development and presentation of expert testimony. A key issue in this case was the cost justification and the evaluation of legal precedents and industry practices regarding the development of outside city rates for utility services.
- » Mr. Giardina provided litigation support services in an engineering and construction lawsuit involving a major southeastern water utility and claims regarding failure or potential failure of a large diameter transmission pipeline. Mr. Giardina was retained by counsel to provide analysis and evaluation of data for the purpose of assessing damage claims asserted by the plaintiff.
- » Mr. Giardina served as Project Manager to provide litigation support regarding a suit involving Alpine Cascade Corporation et. al. v. Pagosa Area Water and Sanitation District, Case No. 97CV15, Archuleta County District Court. Mr. Giardina will review and analyze the financial records of the Pagosa Area District and other related tasks. One of the primary issues that will be addressed is whether the District's purported "enterprise" is being operated as a self-supporting business.
- » For the City of Edmonton, Alberta, Mr. Giardina was retained to provide financial and cost allocation consulting services to the City in a wholesale customer rate dispute before the Alberta Public Utilities Board. Mr. Giardina provided independent advice to the City of Edmonton regarding a broad range of rate-related issues including cost of service determination, cost allocation and rate design. He also assisted the City in the review and preparation of testimony (direct and rebuttal).
- » Mr. Giardina was retained to evaluate damage claims as part of a law suit regarding a contaminated water treatment plant site. His focus was on the damages, as asserted by the plaintiff, which resulted from the "inability" of the plaintiff to refinance outstanding long-term debt. Additionally, RGA assisted legal counsel and other experts in the evaluation and analysis of finance and rate-related issues.
- » Mr. Giardina served as Project Manager on a number of litigation support engagements. Responsibilities have included the development of microcomputer models for use in calculating damage claims and extensive research relating to cost and management accounting issues and preparation of testimony.
- » Financial Analyst for the Colorado Public Utilities Commission. While employed by the PUC, Mr. Giardina presented expert testimony in a number of rate and cost allocation proceedings before the Commission. Areas of coverage included revenue requirement determination in general and specifically numerous accounting and financial issues relating to rate base, cost of capital and the cost of service. As a member of the PUC staff he conducted a number of rate-related audits focusing on cost analysis and cost allocation procedures. These audits then became the basis for development of expert testimony and preparation for cross-examination.

SAMPLE OF OTHER RELEVANT EXPERIENCE

» **City and County of Denver (CO)**

This project was the first ever bond issue (\$30.7 million) for the City of Denver's (City) Wastewater Management Division and, as such, required the development of a number of "bond-related" documents in addition to the financial feasibility plan. The engagement was completed in two phases:

- Reviewed the City's ordinances and regulatory materials concerning the storm drainage utility, including the Denver revised municipal code, wastewater policies and procedures related to the assessment and collection of storm drainage fees within the City. The storm drainage capital projects 6-year and long-term needs were reviewed and the costs of services for maintaining and operating the storm drainage utility, including assessing the current and projected financial requirements of operating the utility and the planned capital projects was assessed.
- Prepared a plan of finance, including projections of storm drainage fees which supported completion of the planned capital projects.

» **Seattle Water Department (WA)**

Mr. Giardina served as Project Manager on an engagement to assist the Seattle Water Department in conducting a comprehensive water cost-of-service and rate study and another rate study a couple of years later. The base-extra capacity cost allocation approach was used for this study. The Department provides retail service to in-city residents and wholesale service to 29 purveyor customers. Issues examined in this study included marginal cost pricing; seasonal rate development; rate of return; and inside/outside rate differentials. He provided consulting services and direction to the Department on each of these issues.

» **Metropolitan Water District of Southern California (CA)**

In 2007-2009, Mr. Giardina facilitated a series of workshops with management, member agencies and stakeholders to assess the economic, political and technical feasibility of a growth-related infrastructure charge. He led workshops to inform participants of the prevailing industry standards for adhering to cost of service principles and navigating California's complex legal environment. Again, in 2011, he lead the Long Range Financial Planning process with a focus on better aligning fixed costs with fixed revenue sources in addition to evaluating a number of financial-related issues.

» **City of Austin Water Utility (TX)**

Mr. Giardina served as Project Director under the Water and Wastewater Cost of Service Rate Study contract for the City of Austin Water Utility (AWU) The project included cost of service and rate studies for the water and wastewater utilities and development of cost of service and rate models. He supervised the preparation several issue papers to educate Public Involvement Committee (PIC) about issues relating to cost of service methodologies and rate design and presented issue paper topics to PIC and the AWU Executive Committee.

Mr. Giardina also served as Project Director for a Revenue Stability Fee Study. He provided expertise relating to revenue stability efforts among water and wastewater utilities throughout the country. In addition, he researched and presented information regarding options for improving utility revenue stability to AWU staff and appointed Joint Subcommittee on AWU's Financial Plan. He assisted in the formulation of the recommendations ultimately adopted by the City including a revenue stability fee structure and associated policies.

» **City of San Diego (CA)**

Mr. Giardina served as Project Director for a Bond Feasibility Study for the City of San Diego Municipal Water and Wastewater Department (MWWD). Mr. Giardina conducted a financial analysis to determine if current rates and proposed future rates could reasonably be expected to provide the revenues necessary to support all costs

of the MWWD and City systems, including capital expenditures, O&M expenses, debt payments, debt coverage requirements, and financial reserve requirements.

Additionally, Mr. Giardina served as Project Director for a project for the City's on-going training initiative. Specifically, he led managers and staff of the Utility Department through a comprehensive financial planning and rate study program. He conducted sessions with the groups during which the fundamental concepts and approaches to financial planning, cost of service and rate design were presented.

He also served as the Project Director for a multi-phased study to assess the feasibility of implementing an individualized or water budget rate methodology.

» **City Council of Salt Lake City (UT)**

Mr. Giardina led the Council through a process of identifying and ranking water rate or pricing objectives. This effort resulted in the adoption of a seasonal rate approach (the existing method was a uniform rate). On the basis of the most recent rate study, the City has adopted a combination fixed-block rate for its residential accounts and a customer-specific block approach for nonresidential accounts. This approach was the result of a comprehensive evaluation of rate options using a 20-member citizen committee.

He also assisted the City Council in developing financial policies and leading a discussion regarding pay-as-you-go versus debt financing for capital projects, and in providing a detailed analysis of a bonding proposal. The work included General Fund activities as well as water, sewer, and storm drainage operations. Mr. Giardina analyzed such issues as alternative financing vehicles (including impact fees) and customer/taxpayer impact analyses. He completed a rate alternative workshop with the City Council which led to the implementation of a seasonal (replacing a uniform) water rate structure. Mr. Giardina developed alternative strength-based sewer rate methodology and assisted the Utility in implementation of both user rates and impact fees.

» **City of Phoenix (AZ)**

Mr. Giardina was retained by the City of Phoenix (City) Water Services Department to develop a long-range financial planning model of the City's water and wastewater utilities. The models, to be used by Department Management and the Natural Resources subcommittee of the City Council, had the capability to examine alternative funding sources for the capital improvement program and project results of operations in overall cash flows. The financial parameters of the City were incorporated into the model so that such indicators could be readily reviewed to ensure that debt service coverage requirements were met or that the use of debt to fund capital projects did not exceed target levels.

As part of an on-going contract with the Department, he converted this model for use with the wastewater utility. The wastewater financial planning model was enhanced so that the revenue requirement can be projected by customer class. The primary reason for this enhancement was to provide the Department with the ability to analyze the impact that anticipated upgrades to the City's two wastewater treatment plants would have on various customer classes. These upgrades were necessary in order to comply with anticipated NPDES permit requirements.

» **City of Tucson (AZ)**

Mr. Giardina served as Project Manager in providing rate and financial services for Tucson Water under a multi-year contract for services, including cost allocation and alternative rate design considerations. Specifically, he assisted the City in analyzing the rate blocks for its inclining block water rate structure and customer class designations. He developed new impact fees and provided recommendations on revenue projections and financial modeling.

» **City of Reno (NV)**

Mr. Giardina served as Project Officer on this comprehensive wastewater rate study. He directed the consulting team in developing a financial model that was used to evaluate revenue sufficiency, determine the cost of providing wastewater service including charges for excess-strength discharges, and determine equitable connection fees based on the cost of expansion. Our interactive approach facilitated the development of a rate structure that was legally defensible, and met the City's goals related to rate defensibility and equitably paying for growth. Unanimous consensus was reached in all forums and the project ended with a unanimous vote by the City Council to adopt all recommendations.

» **City of Santa Fe (NM)**

Mr. Giardina served as Technical Advisor on a project to conduct a financial feasibility study. He evaluated the financial implications of City acquisition of the privately-owned water company. Project objectives included: (1) developing operational costs and revenues; (2) analyzing integration and start-up costs; (3) developing a financial plan for acquiring the water company; (4) determining capital improvement funding requirements; (5) computing a probable range of values for the water company; and (6) quantifying the rate impacts of acquisition on existing customers.

» **El Paso Water Utilities Public Service Board (TX)**

Mr. Giardina served as Project Officer to assist the City of El Paso in identifying and assessing potential organizational and institutional arrangements for the management and funding of stormwater-related activities; and recommend the preferred structure for providing stormwater management and prepare an implementation plan. Subsequently, Mr. Giardina assisted the utility in the creation of the stormwater utility, development of staffing plan and organization structure, preparation of financial plan, rate design and customer billing data base all culminating with the issuance of stormwater bills 18 months after beginning the initial feasibility effort.

Mr. Giardina also served as Project Director for a water and sewer rate and financial planning study for the City of El Paso Water Utilities Public Service Board. He evaluated a number of pricing alternatives including the board's inverted residential block structure and excess use approach for nonresidential customers. Mr. Giardina projected demand reductions based on price elasticity estimates so that, when considered within the spectrum of a comprehensive water conservation program, per capita usage would decrease from 200 to 160 gallons per day by the year 2000. He also developed excess strength sewer surcharges as well as permit fees for significant industrial users and other permitted accounts.

» **Honolulu Board of Water Supply (HI)**

Mr. Giardina served as Project Director on an engagement to conduct a comprehensive rate and financial planning study for the Honolulu Board of Water Supply. He developed several alternative rate methodologies that addressed the pricing objectives of the community. These included the development of impact fees by functional area (e.g., supply, treatment). A major interest to the client was the consideration of a conservation pricing structure which included an increasing unit charge for increasing amounts of water consumed.

In addition, we completed a study for the Board to examine the relationship between impact fees, user charges and conservation pricing and develop a recommended rate and financial plan. This was completed with the development and use of an automated rate, financial planning, and customer impact model.

» **Puerto Rico Aqueduct & Sewer Authority (PUERTO RICO)**

Mr. Giardina served as Technical Advisor for the review of financial forecasts in support of planned capital financing for the Puerto Rico Aqueduct & Sewer Authority (Authority) multi-year capital needs in support of new money and refunding bond issues, and for completing a comprehensive rate study. Mr. Giardina represented the Authority in meetings and presentations with rating agencies and insurance companies for their first public issue

in over a decade. The financial forecast and additional work completed included a comprehensive assessment of efficiency initiatives, resulting increases in revenues and/or decreases in expenditures. This effort proved to be critical in building credibility with the rating agencies as the Authority sought to raise capital through a series of bond issues.

» **City of Winnipeg (Canada)**

Mr. Giardina served as Project Director for an organizational and financial management study for the City of Winnipeg Waterworks, Waste & Disposal Department to evaluate the potential for creating a stormwater utility and establishing a means of financing both capital and operations and maintenance costs.

» **City of San Jose (CA)**

Mr. Giardina also served as Project Director on a study to develop pricing methodologies and rate structures for non-residential water users. He evaluated the range of options available for recovering the cost of providing water service to non-residential customers. The evaluation entailed a conceptual assessment of alternative user charge approaches based on demand characteristics.

Mr. Giardina served as Project Director to conduct a customer class cost-of-service study using a conservation rate approach, and developed impact fees to recover costs associated with major facilities required to serve new development in the City's service area. He developed a methodology for determining amounts to be transferred annually to the City's General Fund. He also developed a microcomputer rate and financial planning model in order to project rates over a five-year time frame. Public input on both the user charges and impact fees were considered when developing the final study recommendations.

PUBLICATIONS / PRESENTATIONS

- » Giardina, R.D., Ash, T., "Constructing Successful Rates: The Art and Science of Revenue and Efficiency," presented at the 5th Annual WaterWise Pre-Conference Workshop, Denver, CO October 24, 2013.
- » Giardina, R.D., Ash, T., Mayer, P., "Constructing Successful Rates," presented at the WaterSmart Innovations Annual Conference, Las Vegas, NV, October 4, 2013.
- » Giardina, R.D., Burr-Rosenthal, Kyrsten, "Considering Water Budget Rates? One City's Approach," presented at the 2013 CA-NV AWWA Spring Conference, Las Vegas, NV, March 27, 2013.
- » Corssmit, C.W., Editor, and contributing editors, reviewers, and technical editors: Hildebrand, M., Giardina, R.D., Malesky, C.F., Matthews, P.L., Mastracchio, J.M., "Water Rates, Fees, and the Legal Environment," American Water Works Association (AWWA), 2nd Edition, 2010. ISBN 978-1-58321-796-2.
- » Giardina, R.D., "Is This the Right Time for You to Form a Stormwater Utility?," presented at a Seminar on Weathering the Storm: Is This the Right Time for You to Form a Stormwater Utility? sponsored by the Water Environment Federation (WEF), Alexandria VA, May 18, 2010. This seminar was also presented in 2011. See also <http://www.wef.org/blogs/blog.aspx?id=7312&blogid=17296>
- » Giardina, R.D., "Financial Viability - Can Budget or Individualized Water Rates Work for You?," presented at the Utility Management Conference sponsored jointly by the American Water Works Association and Water Environment Federation (AWWA/WEF), San Francisco CA, February 21-24, 2010.

- » Giardina, R.D., "Attaining Sustainable Business Performance Finance - Water Budget Based Rates," presented at a Meeting of the Association of Metropolitan Water Agencies (AMWA), New Orleans LA, October 20, 2008.
- » Jackson, D.E., Giardina, R.D., "Financing Options for Drinking Water CIP Projects," presented at a Seminar sponsored by the Arizona Water and Pollution Control Association (AWPCA) on Treatment Technologies for Compliance with the Stage 2 Disinfection Byproducts Rule, Phoenix AZ, February 16, 2006.
- » Giardina, R.D., "Impact Fee with a Defined Short-Term Build-Out Horizon," presented at the National Impact Fee Roundtable, Naples FL, October 22, 2004.
- » Giardina, R.D., "Calculating Impact Fees: Methods," presented at the American Planning Association State Conference, Vail CO, September 24, 2004.
- » Giardina, R.D., "Funding Local Government Services," presented at the 97th Annual Convention of the Utah League of Cities and Towns, Salt Lake City UT, September 15, 2004.
- » Giardina, R.D., "Understanding Water Issues in Arizona," presented at the Government Finance Officers Association Summer Training Program, Tucson AZ, August 20, 2004.
- » Giardina, R.D., "Impact Fees: A Vote of Confidence for Economic Growth?," published in Colorado Government Finance Officers Association (GFOA) Footnotes, December 2003, the Arizona GFOA Newsletter, January 2004, and the Illinois Government Finance Leader, Spring 2004.
- » Giardina, R.D., "Impact Fee Basics / Impact Fees with a Defined Short-Term Build-Out Horizon," presented at the National Impact Fee Roundtable, San Diego CA, October 16, 2003.
- » Giardina, R.D., "Local Government Utilities Establishing Rates for Service," presented at Arizona State University, Phoenix AZ, September 23, 2003.
- » Giardina, R.D., "Selecting a Water Rate Structure through Public Involvement," presented at the Annual Conference of the American Water Works Association, Intermountain Section, Jackson Hole WY, September 17, 2003.
- » Giardina, R.D., "Ratemaking 101," presented at the Government Finance Officers Association of Arizona, Summer Training, Flagstaff AZ, August 22, 2003.
- » Giardina, R.D., "Impact Fees," presented at the Colorado Government Finance Officers Association, Metro Coalition, Golden CO, May 9, 2003.
- » Giardina, R.D., "Impact Fees – A Primer," presented at a Conference of the Colorado River Finance Officers Association, Parker AZ, February 4, 2003.
- » Giardina, R.D., "Impact Fees and Economic Development," presented at the Annual Conference of the Colorado Government Finance Officers Association, Vail CO, November 20, 2002.
- » Giardina, R.D., "Case Study: City of Chandler, Arizona, Utility System Development Charges," presented at the National Impact Fee Roundtable, Phoenix AZ, October 24, 2002.

- » Giardina, R.D., "Using Impact Fees to Fund Streets and Roads," presented at the Utah League of Cities and Towns 2001 City Streets and County Road School Convention, St. George UT, April 25, 2001.
- » Giardina, R.D., "Addressing Capital Needs," presented at the Utah League of Cities and Towns Mid-Year Conference 2001, St. George UT, April 5, 2001.
- » Giardina, R.D., "Fine Tuning Your Rate Structure Using a Citizen Committee," presented at the Annual Conference and Exposition of the American Water Works Association, Denver CO, June 14, 2000.
- » Giardina, R.D., "Impact Fees without Getting in Trouble," presented at the Annual Convention of the Utah League of Cities and Towns, St. George UT, April 13, 2000.
- » Giardina, R.D., "Impact Fees for Small Communities," presented at the Annual Convention of the Utah League of Cities and Towns, Salt Lake City UT, September 16, 1999.
- » Giardina, R.D., "Trends in Privatization," presented at a Conference of the Water Environment Association of Utah, St. George UT, April 24, 1998.
- » Giardina, R.D., "Isn't Competition Wonderful?," presented at the Joint Technical Advisory Committee (JTAC) of the American Water Works Association, Rocky Mountain Section and the Rocky Mountain Water Environment Association, Denver CO, February 26, 1998.
- » Giardina, R.D., "Strategies and Approaches for the Development of Utility Impact Fees," presented at the Annual Conference of the Rural Water Association of Utah, Park City UT, August 25, 1998; and the Joint Annual Winter Conference of the Water Environment Association of Utah/American Water Works Association, Intermountain Section, Salt Lake City UT, January 21, 1998.
- » Giardina, R.D., "Private Sector Competition - What Is It? Who Does It? and Can It Help You?," Workshop presented at the 1997 Joint Annual Conference of the American Water Works Association, Rocky Mountain Section and the Rocky Mountain Water Environment Association, Ruidoso NM, September 14, 1997.
- » Giardina, R.D., "Impact Fees as a Capital Financing Approach," presented at a Conference of the Rocky Mountain Water Environment Association, Denver CO, January 30, 1997.
- » Giardina, R.D., "Conservation Pricing: Meeting Your Conservation Objectives," presented at the Joint Annual Conference of the American Water Works Association, Rocky Mountain Section and the Rocky Mountain Water Pollution Control Association, Sheridan WY, September 10, 1995; and the Annual Conference of the American Water Works Association, Kansas Section, Wichita KS, September 25, 1996.
- » Giardina, R.D., "Turnkey vs. Conventional Approach to Biosolids Facility Construction," presented at the 10th Annual Residuals and Biosolids Management Conference: 10 Years of Progress and a Look Toward the Future, Denver CO, August 20, 1996.
- » Giardina, R.D., Ambrose, R.D., Olstein, M., "Private-Sector Financing," Chapter 15, *Manual of Water Supply Practices, M47 - Construction Contract Administration*, 1996. American Water Works Association.

- » Giardina, R.D., "Contract Operations," Chapter 15, *Operation of Municipal Wastewater Treatment Plants, Manual of Practice-MOP 11*, Fifth Edition, 1996. Water Environment Federation.
- » Giardina, R.D., "Selecting an Appropriate Contract Operator," presented at the 1995 WEF/AWWA Joint Management Conference of the Water Environment Federation/American Water Works Association, Tulsa OK, February 13, 1995.
- » Giardina, R.D., "Wastewater Reuse Capital Funding and Cost Recovery Approaches," presented at the Rocky Mountain Sections of the American Water Works Association and Water Pollution Control Association, Crested Butte CO, September 14, 1994; and the Annual Conference and Exposition of the Water Environment Association of Utah, St. George UT, April 20, 1995.
- » Giardina, R.D., "Private Sector Financing of Public Facilities – When and Why It May Be Appropriate," presented at the Annual Conference of the American Water Works Association, New York NY, June 21, 1994; and Joint Annual Conference of the American Water Works Association, Rocky Mountain Section/Rocky Mountain Water Environment Federation, Steamboat Springs CO, September 10, 1996.
- » Giardina, R.D., "Use of Innovative Pricing Strategies in a Conservation or Demand Management Program," presented at the 67th Annual Conference of the Arizona Water and Pollution Control Association, Prescott AZ, May 6, 1994.
- » Giardina, R.D., "Funding Environmental Compliance – One City’s Approach," presented at the Annual Conference of the Rocky Mountain Water Pollution Control Association, Denver CO, January 28, 1994.
- » Giardina, R.D., "Conservation Pricing – Trends and Examples," presented at the CONSERV 93 Conference and Exposition on The New Water Agenda, Las Vegas NV, December 14, 1993.
- » Giardina, R.D., Simpson, S.L., "A Case Study of the Impact of Conservation Measures on Water Use in Boulder, Colorado," presented at the Joint Annual Conference of the Rocky Mountain Sections of the American Water Works Association and Water Environment Federation, Conservation Workshop, Albuquerque NM, September 19, 1993.
- » Giardina, R.D., "Creating Water Resources through Conservation Pricing," presented at the Western Water Conference of the National Water Resources Association, Durango CO, August 6, 1993.
- » Giardina, R.D., Archuleta, E.G., "A Case Study of the Impact of Conservation Measures on Water Use in El Paso, Texas," presented at the Annual Conference and Exposition of the American Water Works Association, San Antonio TX, June 9, 1993.
- » Giardina, R.D., "Trends in Water Rates," presented at the Annual Conference of the American Water Works Association, Pacific Northwest Section, Seattle WA, May 7, 1993.
- » Giardina, R.D., Blundon, E.G., "Environmental Impact Fees," presented at the Annual Customer Service Workshop sponsored by the American Water Works Association, Seattle WA, March 29, 1993.
- » Giardina, R.D., "Privatization and Other Innovative Approaches to Financing Wastewater Facilities," presented at the Annual Conference of the Nevada Water Pollution Control Association, Las Vegas NV, March 12, 1993.

- » Giardina, R.D., "Guidelines to the Pricing of Municipal Water Service," presented at the First National Water Conference, sponsored by the Canadian Water and Wastewater Association, Winnipeg MB, February 5-6, 1993.
- » Giardina, R.D., "Rates and the Public – Alternative Rate Approaches," presented at a Workshop sponsored by the American Water Works Association, Rocky Mountain Section, Denver CO, November 4, 1992.
- » Giardina, R.D., "Results of the 1992 National Water and Wastewater Rate Survey," presented at the 44th Annual Conference of the Western Canada Water and Wastewater Association, Calgary AB, October 15, 1992; and the 13th Annual Western Utility Seminar, sponsored by the Water Committee of the National Association of Regulatory Utility Commissioners, Redondo Beach CA, April 28, 1993.
- » Giardina, R.D., "Economic Feasibility of Waste Minimization: Assessing All Costs, Including 'Hidden Costs' and Indirect Benefits," presented at the Annual Meeting of the Colorado GEM Network, Denver CO, March 17, 1992.
- » Giardina, R.D., "State of the Art in Rate Setting: Results of the 1990 Water and Wastewater Rate Survey," presented at the Annual Conference of the Canadian Water and Wastewater Association, Montréal QC, November 4, 1991.
- » Giardina, R.D., "Impact of Rates on Water Conservation," presented at Waterscapes'91, an international conference on water management for a sustainable environment, Saskatoon SK, June 2-8, 1991.
- » Giardina, R.D., Birch, D., "Stormwater Management – A Technical and Financial Case Study," presented at the Symposium on Urban Hydrology of the American Water Resources Association, Denver CO, November 8, 1990.
- » Giardina, R.D., "Financing Environmental Site Cleanup Liabilities," presented at the Annual Conference of the Colorado Hazardous Waste Management Society, Denver CO, October 18, 1990.
- » Giardina, R.D., "Rate Making with Conservation in Mind: Results of the 1990 National Water Rate Survey," presented at the CONSERV 90 Conference and Exposition on Water Supply Solutions for the 1990s, Phoenix AZ, August 14, 1990.
- » Giardina, R.D., "Water Marketing – A Case Study," presented at the Profiting from Water Seminar, Santa Monica CA, May 11, 1989.
- » Giardina, R.D., "Landfill Development – the Planning and Management Process," presented at the American Bar Association's Solid Waste Integrated Management Workshop, San Francisco CA, March 1989.
- » Giardina, R.D., "Developing an Equitable Water Rate Structure," published in the American Water Works Association's monthly *Opflow*, February 1989.
- » Giardina, R.D., "Alternative Techniques for Financing Water and Wastewater Capital Expansions," presented at the Joint Annual Conference of the American Water Works Association and Water Pollution Control Association, Rocky Mountain Sections, Snowmass CO, September 14-17, 1988.
- » Giardina, R.D., "Excess Deferred Income Taxes Under the New Tax Law," *Public Utilities Fortnightly*, January 8, 1987.

- » Giardina, R.D., "Trends in Capital Financing for Environmental Facilities," presented at the 1987 Annual Conference of the Missouri Water Pollution Control Association and the 1987 Annual Conference of the Rocky Mountain WPCA Clean Water Conference.



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Counsel

February 26, 2016

James J. Taylor, Esq.
General Counsel
San Diego County Water Authority
4677 Overland Avenue
San Diego, California 92123-1233

Dear Mr. Taylor:

Response to Public Records Act Request Dated February 18, 2016

We received your Public Records Act request, dated February 18, 2016, on that date. A copy of your request is attached.

This response is made in compliance with California Government Code Section 6253(c), which requires an agency to notify a person making a request within 10 days whether a request seeks disclosable records. We have determined that your request seeks disclosable records, with the exception of Metropolitan's financial planning model, which is exempt from disclosure under Government Code Section 6254.9(a) as a proprietary software program developed by Metropolitan that contains nondisclosable formulas and programming code.¹

Disclosable records that are responsive to your request, to the extent material has not already been provided to the Metropolitan Board, are being collected and will be provided to SDCWA in electronic format on DVD(s).

Pursuant to Government Code Section 6253(c), Metropolitan will notify you within 14 days of the date on which we will provide the responsive and disclosable records to you. The voluminous amount of records and our need to remove the proprietary formulas and code from spreadsheets impact the timing of the production and our ability to state the production date at

¹ SDCWA already received the financial planning model through the rate litigation, subject to the parameters and restrictions of the Court's protective order, so SDCWA has had full opportunity to view it and understands its operations.

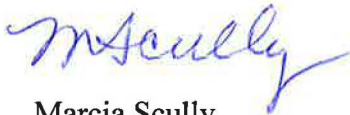
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

James J. Taylor, Esq.
February 26, 2016
Page 2

this time. We will also post this material on-line so it is available to all Metropolitan Board members, member agency staff, and the public. In addition, if any Board member would like, we will provide the material to them on DVD(s).

Thank you for your request. Please direct all communications regarding your request to me.

Very truly yours,



Marcia Scully
General Counsel



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

VIA EMAIL

February 23, 2016

Director Michael T. Hogan
Director Keith Lewinger
Director Fern Steiner
Director Yen C. Tu
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Re: Your letters dated February 4, 2016, February 6, 2016, and February 9, 2016

Dear Directors:

This letter addresses your comments and requests in your letters dated February 4, 2016, February 6, 2016, and February 9, 2016, relating to Metropolitan's 2016 budget and rate setting process.

February 4, 2016 Letter re Written Request for Notice and Request for Data and Proposed Methodology under Government Code Section 54999.7

We have received your request for notice of the public meetings relating to establishment of Metropolitan's 2017 and 2018 rates and charges, and the data and proposed methodology relating to such rates and charges, pursuant to Government Code Section 54999.7. SDCWA has and will continue to receive notice of all meetings, workshops, and public hearings relating to Metropolitan's 2017 and 2018 rates and charges, as well as the information, data, and methodology supporting the rates and charges proposal, in accordance with Metropolitan's practices and the Brown Act.

As you know, Metropolitan disputes SDCWA's litigation position that Section 54999.7 applies to Metropolitan's rates. SDCWA has previously agreed that Section 54999.7 does not apply to Metropolitan. This is an issue in the pending litigation between SDCWA and Metropolitan. The judgment in the litigation is currently on appeal and, therefore, is not binding on Metropolitan. Nevertheless, Metropolitan has and will continue to fully comply with Section 54999.7's requirements through the budget and rates and charges information provided and to be provided to the member agencies and the public.

SDCWA Directors
February 23, 2016
Page 2

February 6, 2016 Letter Re Board Memo 9-2

We appreciate receiving your preliminary written comments in advance of the first workshop of the 2016 budget and rate setting process, held on February 8, 2016 (“Workshop #1”). Staff has reviewed your written comments, as well as your and other Metropolitan Directors’ comments made at Workshop #1, at the February 9 Board meeting, and at the February 23, 2016 Workshop #2. Consistent with past practice, staff has and will continue to address all Directors’ comments and questions at the scheduled workshops to ensure full participation of the Finance & Insurance Committee and Board. As we have informed the Board, the proposed schedule for the 2016 budget and rate setting process will consist of four workshops, with a fifth workshop available if the Board requests it, and one public hearing before the Board may take action on April 12 to adopt the biennial budget and rates and charges.

You have also included in your February 6 letter a request that the General Counsel provide (1) a public presentation regarding the applicability of Proposition 26 to wholesale water agencies such as Metropolitan, and (2) a legal opinion “why MWD’s actions” with respect to the Readiness-to-Serve and Capacity Charges “are not the opposite of what was intended by passage of” Sections 124.5 and 134 of the Metropolitan Water District Act. As you know, the applicability of Proposition 26 to Metropolitan’s wholesale water rates is an issue in the pending litigation between SDCWA and Metropolitan. Metropolitan contends that Proposition 26 does not apply to its rates and Metropolitan has explained that position extensively in the litigation. As stated above, the judgment in the litigation is on appeal and is not currently binding on Metropolitan. Metropolitan’s position is that its rates and charges comply with all applicable law, including but not limited to, the Metropolitan Water District Act.

February 9, 2016 Letter re “2016 Rate Setting Process and Schedule for Public Hearing; Request for Distribution of Cost of Service Report Prior to the Public Hearing”

You commented in your February 9 letter that you have not received “MWD’s 2016 Cost of Service Report” and that Government Code Section 54999.7(d) and (e) require distribution of such report no later than 30 days before rates and charges are adopted.

First, we note that staff has made available prior to Workshop #1 the proposed biennial budget and ten-year forecast, containing revenue requirements and cost of service analysis. Staff also made an extensive presentation regarding the revenue requirements that form Metropolitan’s projected costs of service. Moreover, as explained in the February 9 Board Letter, “[t]he estimated rates are based on Metropolitan’s current methodology for developing rates and charges to produce the necessary revenue required to cover costs.” (Board Memo 9-2, p. 1.) In other words, the proposed rates and charges, with the exception of the Treatment Surcharge, will continue to be proposed pursuant to the rate structure that has been in place since January 1, 2003. Further explanation of the cost of service analysis supporting the continuing rate structure, including a Cost of Service Report, will be presented throughout the budget and rate process.

Second, as stated above, Metropolitan agrees with SDCWA’s prior position that Government Code Section 54999.7 does not apply to Metropolitan. In any event, we point out that SDCWA

SDCWA Directors
February 23, 2016
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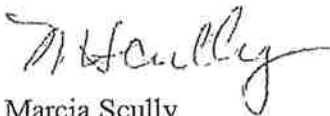
has misread Section 54999.7. The Section requires that the “request of any affected public agency” be “made not less than 30 days prior to the date of the public meeting to establish or increase any rate, charge, surcharge, or fee” (Cal. Gov. Code § 54999.7(e).) The 30-day deadline applies to the request for information – not to the provision of information as you represent in your letter.

We will respond separately to your correspondence received after February 9, 2016. Thank you again for providing your comments in advance and in writing.

Sincerely,



Gary Breaux
Assistant General Manager/ Chief Financial Officer



Marcia Scully
General Counsel

cc: Metropolitan Board of Directors



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

VIA EMAIL

February 22, 2016

Director Michael T. Hogan
Director Keith Lewinger
Director Yen C. Tu
Director Fern Steiner
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated October 26, 2015 regarding Audit and Ethics Committee Agenda Item 3-b

This letter addresses your comments, received October 26, 2015, on Audit and Ethics Committee Agenda Item 3-b: Discussion of Independent Auditor's report from MGO, LLP for fiscal year 2014/15.

You commented that Metropolitan's water sales amount for fiscal year ending June 30, 2015 "is not accurate; that number is only achieved by characterizing as 'water sales' the revenue MWD is actually paid for wheeling the Water Authority's independent Colorado River water under the Exchange Agreement." SDCWA's payments under the Exchange Agreement are not for wheeling. SDCWA has previously stated that the agreement is not for wheeling, in statements before the California State Water Resources Control Board, the San Francisco and Sacramento Superior Courts, and the California Court of Appeal, including in sworn testimony.

You also commented that Note 1(c) does not acknowledge receipt of revenues such as those under the Exchange Agreement. In fact, Note 1(c) states that water sales revenues includes revenues from exchange transactions.

You further commented that "Judge Karnow specifically found that the Water Authority is not buying water from MWD under the Exchange Agreement" (emphasis in original), in reference to the San Francisco Superior Court's ruling on the preferential rights claim in the SDCWA v. Metropolitan litigation. The Superior Court's decision is under appeal and does not have binding

effect. In any event, the parties' disagreement in the litigation as to whether the Exchange Agreement payments are for the "purchase of water," as that term is used in the preferential rights statute and as it has been interpreted by the California Court of Appeal, has no bearing on Metropolitan's stated water sales revenues. The stated water sales revenues show the revenues received from the payment of Metropolitan water rates. It is agreed that under the Exchange Agreement's price term, SDCWA pays Metropolitan water rates (the System Access Rate, System Power Rate, and Water Stewardship Rate).

The matters raised in your comments are not material to a reader of the financial statements. Metropolitan prepares its financial statements in accordance with accounting principles generally accepted in the United States. Information relevant to the fair presentation of financial statements that are free from material misstatement and in accordance with the aforementioned accounting principles was provided to MGO during the course of the audit. Such information was not inclusive of SDCWA's comments on Metropolitan's bond disclosures, since SDCWA's comments did not provide additional undisclosed information which was relevant to the financial statements.

We do note that Metropolitan issued its Comprehensive Annual Financial Report on December 15, 2015, which includes the basic financial statements. Note 15, Subsequent Events, includes a discussion of the final judgment issued on November 18, 2015 by the San Francisco Superior Court for the 2010 and 2012 SDCWA v. Metropolitan cases, the damages and prejudgment interest awards, and the filing of the Notice of Appeal in each case on November 19, 2015.

Thank you for your comments on Metropolitan's Basic Financial Statements.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Breaux", written in a cursive style.

Gary Breaux

Assistant General Manager/ Chief Financial Officer



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

VIA EMAIL

November 12, 2015

Director Michael T. Hogan
Director Keith Lewinger
Director Fern Steiner
Director Yen C. Tu
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated October 12, 2015 regarding Board Letter 8-2

This letter addresses your comments, received October 12, 2015, on Board Item 8-2: Approve and authorize the execution and distribution of Remarketing Statements in connection with the remarketing of the Water Revenue Refunding Bonds, 2011 Series A1 and A3 and 2009 Series A2 - **OPPOSE** ("October Letter"). Your general comments are addressed below, followed by your specific comments and Metropolitan's responses.

Appendix A provides material financial and operating information about Metropolitan to potential investors. Appendix A is prepared by Metropolitan staff and reviewed by Metropolitan's Board of Directors. Metropolitan's objective is to provide complete and accurate disclosure regarding the bonds being offered and their security and source of payment to potential investors. Appendix A is updated periodically to provide current information. Forward-looking statements or projections are based on current information such as the facts and assumptions contained within the biennial budget and ten-year financial forecast.

The *General Comments* in your letter incorporate by reference all of the comments and objections contained in your delegation's past letters relating to Metropolitan's authorization, execution and distribution of Offering Statements in connection with the issuance of bonds, which were most recently addressed in Metropolitan's response letter dated June 22, 2015 to SDCWA's Comment Letter dated June 5, 2015.

Your October Letter provides two new principal areas in which you assert the current draft Appendix A fails to disclose or accurately describe material facts:

- (1) the status of MWD's unrestricted reserves as related to the deposit it has represented to the Superior Court that it maintains and is required to maintain as security for payment of the Water Authority's judgment and accrued interest in the rate litigation (MWD has represented to the Court that it is holding this money in a "separate account" and yet it appears to be commingled with unrestricted reserves); and
- (2) material facts that have been judicially determined in the rate litigation, but which MWD continues to misrepresent in various parts of Appendix A. While we recognize that MWD intends to appeal the judgment of the Court, that does not mean that it is not also required to disclose and accurately present to the MWD Board of Directors and potential investors the Court's factual findings and orders as they relate to MWD's contentions in the litigation and included in Appendix A.

In conformance with SDCWA's and Metropolitan's exchange agreement, Metropolitan has maintained in a separate interest bearing account SDCWA's payments under the exchange agreement that are in dispute and interest earned thereon. Metropolitan has continually reported in Appendix A the amounts it is holding pursuant to the exchange agreement. SDCWA requested that the trial court issue a prohibitory injunction with respect to these funds and, in its October 30, 2015 order, the Court rejected that request. Metropolitan has accurately disclosed the material events in the litigation.

Your October Letter furthermore asserts that MWD is either in breach of its contractual obligation under the Exchange Agreement to maintain a cash deposit sufficient to secure payment of the Water Authority's judgment and accrued interest; or, it is not in compliance with minimum reserve requirements under its Financial Reserve Policy. The exchange agreement does not require Metropolitan to maintain "a cash deposit." SDCWA requested that the trial court issue a prohibitory injunction stating that Metropolitan must hold the amounts in a "restricted cash fund" and, in its October 30, 2015 order, the Court rejected that request. The separate interest bearing account in which the funds are maintained is part of Metropolitan's unrestricted reserves. This does not violate the exchange agreement or Metropolitan's Financial Reserve Policy.

Finally the October Letter provides that several representations in Draft Appendix A are inconsistent with material facts that have been judicially determined against MWD in the rate litigation. Metropolitan has accurately disclosed the material events in the litigation, any of which may be updated to reflect material developments prior to printing.

Comments on Draft Appendix A dated October 1, 2015

The following specific SDCWA comments and Metropolitan's responses refer to the draft of Appendix A dated October 1, 2015, showing changes from the May 28, 2015 draft (Attachment 1).

A-6: Metropolitan's Water Supply. MWD is changing the statement that "hydrologic conditions can have a significant impact on MWD's 'water supply'" to the statement that, "hydrologic conditions can have a significant impact on MWD's 'two principal imported water supply sources.'" What water supply sources has MWD acquired since its last Official Statement in June 2015 that are not State Water Project or Colorado River supplies, necessitating this change?

Metropolitan Response: The statement will be edited to read, "Hydrologic conditions can have a significant impact on Metropolitan's imported water supply sources."

A-7: Drought Response Actions. Staff's suggested edits to the Draft Appendix A state that implementation of MWD's Water Supply Allocation Plan at a Level 3 Regional Shortage Level is anticipated to reduce supplies delivered by MWD to its member agencies in fiscal year 2015-16 to approximately 1.6 million acre-feet (AF). By contrast, language in the Official Statement of last June - now being deleted - states that, "[o]n April 14, 2015, the Board declared the implementation of the Water Supply Allocation Plan at a Level 3 Regional Shortage Level, effective July 1, 2015 through June 30, 2016. Implementation of the Water Supply Allocation Plan at a Level 3 Regional Shortage Level is anticipated to reduce supplies delivered by MWD to MWD's member agencies by 15 percent and water sales to approximately 1.8 million AF." Even though the June disclosure noted the Governor's Order to reduce water use by 25 percent, it stated that member agencies' diminished local supplies will cause MWD's demands to be at 1.8 million AF. Now, in the space of less than four months, MWD has reduced its estimated water sales by 200,000 acre-feet (AF), even though there are no changed factual circumstances identified in the new Draft. Further, MWD staff reported last month that water sales could be as low as 1.5 million AF. Please explain the basis of the new projections and what if anything has changed since June 2015 to account for this substantial reduction in MWD's estimated water sales in fiscal year 2015-16, and, why the new Draft does not disclose the reported potential for water sales to be as low as 1.5 million AF.

Similarly, the storage reserve level as of December 31, 2015 is described in the Draft Appendix A as 1.36 million AF. While this is consistent with reports under MWD's Water Surplus and Drought Management Plan, it is not consistent with forecasted sales of 1.6 million AF, which is lower than a Level 3 water supply allocation. If sales are down, there should be more water in storage. Please explain this apparent discrepancy.

Metropolitan Response: We now have several months of actual water sales to better gauge the response to the Governor's Order and as a result have updated the projected

water sales for the year to 1.6 MAF. This is the projection we shared with the Board at the October F&I Committee meeting. We have also provided the Board with scenarios at different water sales levels to demonstrate that Metropolitan has sufficient unrestricted reserves in the event water sales are lower for Fiscal Year 2015/16.

Regarding storage estimates in Appendix A, there is no discrepancy. Metropolitan is forecasting sales for the fiscal year 2015/16 of 1.6 MAF, based on current trends. The timing of the sales compared to available supplies may or may not impact calendar year-end storage levels. Actual supplies available in the fiscal year will be affected by events on the Colorado River and northern California watersheds, which are not known. Actual sales may also vary from 1.6 MAF.

The Water Supply Allocation Plan is tracking estimated storage levels to help inform the Board; depending on demands and storage levels, the Board may or may not act to change the WSAP level from the current Level 3. These storage balances are estimates; the storage balance at calendar year-end will be impacted by the same variables that may affect available supplies as well as Metropolitan demands.

A-9: Integrated Resources Plan. The last paragraph on page A-9 states that the second phase of the IRP is development of "implementation" policy after the conclusion of the "technical" update. Unless staff believes that the Board will be limited in its deliberation of the IRP to policies related to "implementation" of the IRP, we suggest deleting the word "implementation."

Metropolitan Response: Nothing in the discussion of the IRP suggests that the Board will be limited in its deliberation of the IRP to policies related to "implementation" of the IRP. Staff has updated the Board on the IRP technical update since April 2015, and the Board has provided input on the results of the technical processes.

A-11: Water Transfers and Exchanges. Why has staff deleted the word, "acquisition"? Given MWD's recent proposed and consummated land acquisitions in Palos Verde and the Delta, deletion of this word is not warranted. Please explain.

Metropolitan Response: The term "acquisition" was meant to refer to water acquired by Metropolitan, not land. As your question highlights, the term was a source of confusion. Therefore, staff has deleted it.

A-11: Seawater Desalination. The section on seawater desalination is a sub-paragraph under Integrated Resources Plan Strategy, which is a sub-paragraph of the section describing "Metropolitan's Water Supply," which begins at page A-6. The Water Authority's seawater desalination project is not a MWD Water Supply and the Water Authority does not receive "financial incentives" from MWD for the project, as suggested. The reference to the Water

Authority's project should be deleted here and included instead in sections of the Draft that report member agency local projects (Regional Water Resources, for example, like the Los Angeles Aqueduct) and reduced demand for MWD water (MWD Revenues (A-40) and Management's Discussion of Historical and Projected Revenues and Expenses (A-71)).

Metropolitan Response: The Water Authority's seawater desalination project is already described in the section that reports member agency local projects. See "Local Water Supplies – Seawater Desalination" at A-37. The description of the project will be removed from the IRP Strategy section.

A-11-A-16: State Water Project. We found the proposed edits regarding Bay Delta Conservation Plan (BDCP) collectively, confusing. On the one hand, the Draft is amended to add language stating that the "basic, underlying purpose of the BDCP is to restore and protect Delta water supply, water quality and ecosystem health within a stable regulatory environment" (A-14), but then makes other edits changing statements that the BDCP is "being developed" that way to a statement that that is the BDCP as it was "originally conceived" (A-15). The Draft goes on to disclose that 50-year permits as originally conceived were not possible; but, it does not close the loop on how the need for a stable regulatory environment will be achieved. Please explain or suggest edits to address this concern.

Metropolitan Response: Thank you for your comment. The section will be edited for clarity.

A-18: Colorado River Aqueduct. The proposed edits suggest that it was a severe drought and reduced Colorado River storage that "ended" the availability of surplus water deliveries to MWD and "resulted" in California being limited to 4.4 million AF since 2003. These edits should not be made because they do not accurately describe the circumstances or the factual and legal record why California is limited to 4.4 million AF or why MWD no longer has access to surplus water on the Colorado River. There have been absolutely no changes since the last Official Statement of June 2015 that would explain the need for these edits at this time.

Metropolitan Response: Your comment does not reflect what is stated in Appendix A. Appendix A states that a) California is apportioned the use of 4.4 million acre-feet of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California and Nevada, b) that during the 1990s, Arizona and Nevada increased their use of water from the Colorado River, and by 2002 no unused apportionment was available for California, and c) that a severe drought in the Colorado River Basin reduced storage in system reservoirs, ending the availability of surplus deliveries to Metropolitan.

A-21: *Quantification Settlement Agreement*. However artfully described in the Draft Appendix A, MWD cannot credibly deny or change the fact that its projected sales are reduced by 180,000

AF and that San Diego is buying this water from IID, not MWD. The statement that MWD "expects to be able to annually divert 850,000 AF of Colorado River water -- without disclosing that 180,000 AF of that water belongs to the Water Authority -- is misleading, especially as the same sentence goes on to refer to water "from other water augmentation programs [MWD] develops." The section also refers prospective investors to "METROPOLITAN REVENUES--Principal Customers," where MWD continues the charade that its wheeling revenues represent the purchase and sale of MWD water (see page A-50 and section III above). This is misleading by design.

Metropolitan Response: Appendix A accurately describes the estimated volume of Colorado River water that MWD will divert each year. Your comment that 180,000 AF of water diverted by MWD "belongs to the Water Authority" is incorrect and would be misleading. The exchange agreement between MWD and the Water Authority provides that the Water Authority will exchange water purchased by the Water Authority from IID, and water conserved by lining of portions of the All-American and Coachella Canals, by transfer to MWD at its intake on Lake Havasu. Thus, the water becomes MWD water when it is diverted. The Water Authority is required to give MWD five years written notice if it no longer will exchange the conserved water with MWD. The Water Authority has not given such notice.

A-22: Sale of Water by the Imperial Irrigation District to San Diego County Water Authority. The sentence at the bottom of page A-22 that -- "[i]n consideration for the conserved water made available to MWD by SDCWA, a lower rate is paid by SDCWA for the exchange water delivered by MWD" -- should be deleted. At a minimum, MWD must disclose that MWD's legal theory and argument that the Water Authority is purchasing MWD water under the Exchange Agreement was expressly rejected by Judge Karnow in his Statement of Decision. See discussion at Section III above. Further, the proposed edits to delete reference to the volume of water MWD is wheeling for the Water Authority under the Exchange Agreement is unnecessary. In fact, this information should be provided.

Metropolitan Response: The statement is correct and does not need further clarification. As further stated in the paragraph, the exchange agreement sets the price for the exchange water delivered to the Water Authority at "the charges set by Metropolitan's Board from time to time to be paid by its member agencies for the conveyance of water through Metropolitan's facilities" and the charges set by Metropolitan's Board from time to time to be paid by its member agencies for the conveyance of water through Metropolitan's facilities those charges are the subject of litigation by the Water Authority.

A-24: Interim Surplus Guidelines. What is the reason for the proposed deletion stating that, "[t]he Interim Surplus Guidelines contain a series of benchmarks for reductions in agricultural use of Colorado River water within California by set dates"?

Metropolitan Response: The statement was deleted because the referenced benchmarks have all been met.

A-51: Water Sales Revenues. As noted above, MWD fails to disclose that it receives wheeling revenues from the Water Authority. MWD is obligated to disclose the findings and decision by the Superior Court in the rate case, whether or not it intends to appeal. MWD should also disclose here or elsewhere in the draft Appendix A that, since 2012, it has collected \$824,000,000 more from MWD ratepayers than needed to pay its actual budgeted expenses, of which \$743,000,000 exceeded the maximum reserve limits and that this amount may be subject to future claims. Finally, the statement that "MWD uses its financial resources and budgetary tools to manage the financial impact of the variability in revenues due to fluctuations in annual water sales," is patently untrue. This very month, the MWD Board of Directors is being asked by staff to issue \$500 million in bonds, because MWD has now spent not only 100 percent of its budgeted revenues, but also the additional \$824,000,000 it over-collected from MWD ratepayers without any cost of service analysis.

Metropolitan Response: Revenues generated as a result of the exchange agreement between SDCWA and MWD are not wheeling revenues. Furthermore, the distinction between wheeling revenues and other revenues is not material to an investor. Appendix A describes Metropolitan's water sold and water sales in aggregate. On the page you reference in your comment, Appendix A expressly states that the table titled SUMMARY OF WATER SOLD AND WATER SALES "sets forth the acre-feet of water sold and water sales (including sales from water wheeling and exchanges) for the five fiscal years ended June 30, 2015."

Appendix A will be updated to show that the Board adopted an ordinance making the necessary findings to issue up to \$500 million in new water revenue bonds.

A-52: Rate Structure. MWD should disclose in this section on its rate structure (rather than requiring investors to wade through several cross-references) that its rates have been determined to violate the common law, California statutory law and the California Constitution.

Metropolitan Response: Metropolitan has disclosed the material facts concerning the *SDCWA v. Metropolitan* litigation in the section that concerns the litigation. This includes the trial court's rulings concerning Metropolitan's rates adopted in 2010 and 2012, which are subject to appeal.

A-53: Litigation Challenging Rate Structure. We have several objections regarding disclosures related to the litigation challenging MWD's rate structure. In addition to the general concerns expressed at section II above:

MWD states that, "the Court granted MWD's motion for summary adjudication of the cause of action alleging illegality of the 'rate structure integrity' provision in conservation and local resources incentive agreements, dismissing this claim in the first lawsuit." What MWD fails to disclose is that the claim was dismissed on the basis of the Water Authority's supposed lacked standing to challenge the RSI provision; and, that the Court otherwise found the rate structure integrity provision to be unreasonable and inappropriate.

As noted in prior letters, the statement that the "Court found that SDCWA failed to prove its 'dry-year peaking' claim that MWD's rates do not adequately account for variations in member agency purchases" is inaccurate. What the Court stated was that, "the record does not tell us that all these charges are sufficient to account for all of the costs of providing what I have called contingency capacity" (April 24, 2014 Statement of Decision at page 64).

Metropolitan Response: Metropolitan's descriptions of the Court's rulings on these claims are accurate and state the pertinent material information. The trial court granted Metropolitan's motion for summary adjudication of SDCWA's Rate Structure Integrity cause of action, ruling in Metropolitan's favor. The basis of the Court's ruling was that SDCWA lacked standing to assert the cause of action. The Court's statements concerning how it would have ruled if SDCWA did have standing is dicta that is without legal effect.

The trial court ruled in Metropolitan's favor on SDCWA's "dry-year peaking" claim, on the basis that SDCWA failed to prove the claim. Specifically, the Court stated: "under either the substantial deference or de novo standard, San Diego has not shown there is a "dry year peaking" phenomenon for which Met's rates fail to fairly account. No violation of the pertinent law has been shown with respect to 'dry year peaking.'" (April 24, 2014 Statement of Decision at page 65).

A-55: Litigation Challenging Rate Structure. What is MWD's intention and the reason for the proposed edit changing the reference to the "Exchange Agreement" to the "exchange agreement"? Given the Court's ruling on October 9, MWD now must also disclose the Order Granting San Diego's Request for Prejudgment Interest; and, add this amount to the deposit it is holding as security under the Exchange Agreement.

Metropolitan Response: The change from "Exchange Agreement" to "exchange agreement" was made for consistency purposes. Appendix A will be updated to disclose the Court's award of prejudgment interest. The exchange agreement does not require Metropolitan to maintain the statutory prejudgment interest award in the interest bearing account for SDCWA's disputed payments. The Court has not issued such an order. SDCWA's proposed judgment filed with the Court recognizes the distinction between the amount held in the exchange agreement account and the prejudgment interest award.

A-55: Member Agency Purchase Orders. The Water Authority has previously expressed its opposition and concerns regarding the illusory contracts described as "Member Agency Purchase Orders;" those concerns and all past communications with MWD on this subject are incorporated herein by reference. There is no cost of service basis for these purported agreements including but not limited to the fact that MWD does not even set a Tier 2 Water Supply Rate as described.

Metropolitan Response: The disclosure concerning Member Agency Purchase Orders is accurate as stated in Appendix A.

A-58: Financial Reserve Policy. See the Water Authority's letter of this date RE Board Item 8-2: Approve and authorize the execution and distribution of Remarketing Statements in connection with the remarketing of the Water Revenue Refunding Bonds, 2011 Series A1 and A3 and 2009 Series A2 - **OPPOSE** and Section III above, incorporated herein by reference.

Further, MWD has represented to the Court in the rate litigation that it has established a "separate account" as a "security deposit" to cover the payment of the judgment and interest awarded to the Water Authority. It does not appear from any of the disclosures in the Draft Appendix A that this account exists; rather, it is money that is commingled with MWD's Unrestricted Reserves, which must be maintained to satisfy MWD's minimum reserve requirements and which are potentially subject to being spent or otherwise used by the MWD Board of Directors. As noted in section II above, there isn't enough cash available in order to satisfy the Water Authority's judgment and interest, while at the same time, meeting MWD's minimum reserve requirements.

As a detail, MWD has not corrected its prior reference to holding \$188 million - rather than \$209.8 million - in the last paragraph on page A-58.

Regarding the Board's approval of \$44.4 million to pay Southern Nevada Water Authority from unrestricted reserves, it does not appear that sufficient funds were available in unrestricted reserves to make this payment without either breaching MWD's contractual obligation to the Water Authority or falling below minimum reserve levels.

Metropolitan Response: Metropolitan's minimum reserve levels comply with its Financial Reserve Policy.

A-60: Ten Largest Water Customers. The numbers reflected in this schedule need to be corrected to show that the Water Authority is not purchasing MWD water when it pays MWD for the transportation of water under the Exchange Agreement.

Metropolitan Response: The schedule is accurate. The schedule shows payments of Metropolitan's water rates. Under the exchange agreement, SDCWA pays Metropolitan's water rates (which is the price term SDCWA requested).

A-60: Preferential Rights. The Draft must be amended to disclose the Court's findings and orders in the rate litigation, which are omitted.

Metropolitan Response: The courts findings and orders in the rate litigation regarding preferential rights are discussed in "METROPOLTAN REVENUES – Litigation Challenging Rate Structure," which is referenced within the *Preferential Rights* section.

A-61: California Ballot Initiatives. The Draft must be amended to disclose the Court's findings and orders in the rate litigation, which are omitted.

Metropolitan Response: The Court's ruling in the rate litigation regarding preferential rights is discussed in "METROPOLTAN REVENUES – Litigation Challenging Rate Structure," which is referenced within the *California Ballot Initiatives* section, however, the sections will be updated for consistency.

A-77: Water System Revenue Bond Amendment. Why is the language in the paragraph above the projected costs for State Water Project water being deleted? Is an updated explanation not required?

Metropolitan Response: The table for projected costs for State Water Project now begins with FY 2015/16, which is based on Metropolitan's adopted biennial budget for FY 2014/15 and 2015/16 as are the other years in the table, through FY 2019/20. The draft of Appendix A dated May 28, 2015, which you last reviewed, began with FY 2014/15, which, at the time of publication, was the then current fiscal year, and its numbers were based on actual financial results and revised projections-as were then available. Similarly, the next version of App. A will reflect a revision to this table where FY 2015/16 information will be based on actual financial results through September 30, 2015 and revised projections for the balance of FY 2015/16. However, the other years, through FY 2019/20, will still reflect the projections included in the biennial budget.

A-83: Historical and Projected Revenues and Expenses. MWD's "water sales" need to be corrected for the reasons discussed in this letter and Statements of Decision by Judge Karnow in the rate cases.

Metropolitan Response: The schedule is accurate. The schedule shows payments of Metropolitan's water rates. Under the exchange agreement, SDCWA pays Metropolitan's water rates (which is the price term SDCWA requested).

A-85: Management's Discussion of Historical and Projected Revenues and Expenses. The statements contained in this section of the Appendix A suffer from the same deficiencies as noted above, particularly with regard to a "budget" process that is designed to collect more revenues than budgeted expenses in seven out of ten years; MWD's adoption of programs and spending measures that have resulted in the unbudgeted spending of hundreds of millions of dollars, with no cost-of-service justification; and MWD's failure to maintain a separate account as a security deposit to secure payment of the judgment and interest owed to the Water Authority, as represented to the Superior Court.

Metropolitan Response: This section accurately describes Metropolitan's budget process and ten-year financial forecast. As previously explained, Metropolitan has maintained the separate interest bearing account provided for in the exchange agreement.

Thank you for your comments on Metropolitan's Remarketing Statements. We have carefully reviewed and considered them and circulated them to our bond counsel team, financial advisor, and underwriters. Appendix A will be revised to address certain comments as described in this letter.

Sincerely,



Gary Breaux
Assistant General Manager/Chief Financial Officer

cc: J. Kightlinger
MWD Board Members
SDCWA Board of Directors and Member Agencies

Attachment 1— Appendix A draft dated October 1, 2015, showing changes from the
May 28, 2015 draft

APPENDIX A

The Metropolitan Water District of Southern California



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INTRODUCTION

This Appendix A provides general information regarding The Metropolitan Water District of Southern California (“Metropolitan”), including information regarding Metropolitan’s operations and finances. Statements included or incorporated by reference in this Appendix A constitute “forward-looking statements.” Such statements are generally identifiable by the terminology used such as “plan,” “project,” “expect,” “estimate,” “budget” or other similar words. Such statements are based on facts and assumptions set forth in Metropolitan’s current planning documents including, without limitation, its most recent biennial budget. The achievement of results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Actual results may differ from Metropolitan’s forecasts. Metropolitan is not obligated to issue any updates or revisions to the forward-looking statements in any event.

Metropolitan maintains a website that may include information on programs or projects described in this Appendix A; however, none of the information on Metropolitan’s website is incorporated by reference or intended to assist investors in making an investment decision or to provide any additional information with respect to the information included in this Appendix A. The information presented on Metropolitan’s website is not part of the ~~Official~~[Remarketing](#) Statement and should not be relied upon in making investment decisions.

Formation and Purpose

Metropolitan is a metropolitan water district created in 1928 under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended (herein referred to as the “Act”). The Act authorizes Metropolitan to: levy property taxes within its service area; establish water rates; impose charges for water standby and service availability; incur general obligation bonded indebtedness and issue revenue bonds, notes and short-term revenue certificates; execute contracts; and exercise the power of eminent domain for the purpose of acquiring property. In addition, Metropolitan’s Board of Directors (the “Board”) is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan’s service area.

Metropolitan’s primary purpose is to provide a supplemental supply of water for domestic and municipal uses at wholesale rates to its member public agencies. If additional water is available, such water may be sold for other beneficial uses. Metropolitan serves its member agencies as a water wholesaler and has no retail customers.

The mission of Metropolitan, as promulgated by the Board, is to provide its service area with adequate and reliable supplies of high quality water to meet present and future needs in an environmentally and economically responsible way.

Metropolitan’s charges for water sales and availability are fixed by its Board, and are not subject to regulation or approval by the California Public Utilities Commission or any other state or federal agency. Metropolitan imports water from two principal sources: northern California via the Edmund G. Brown California Aqueduct (the “California Aqueduct”) of the State Water Project owned by the State of California (the “State” or “California”) and the Colorado River via the Colorado River Aqueduct (“CRA”) owned by Metropolitan.

Member Agencies

Metropolitan is comprised of 26 member public agencies, including 14 cities, 11 municipal water districts, and one county water authority, which collectively serve the residents and businesses of more than 300 cities and numerous unincorporated communities. Member agencies request water from Metropolitan at

various delivery points within Metropolitan’s system and pay for such water at uniform rates established by the Board for each class of water service. Metropolitan’s water is a supplemental supply for its member agencies, most of whom have other sources of water. See “METROPOLITAN REVENUES—Principal Customers” in this Appendix A for a listing of the ten member agencies with the highest water purchases from Metropolitan during the fiscal year ended June 30, ~~2014~~2015. Metropolitan’s member agencies may, from time to time, develop additional sources of water. No member is required to purchase water from Metropolitan, but all member agencies are required to pay readiness-to-serve charges whether or not they purchase water from Metropolitan. See “METROPOLITAN REVENUES—Rate Structure”, “—Member Agency Purchase Orders” and “—Additional Revenue Components” in this Appendix A.

The following table lists the 26 member agencies of Metropolitan.

<u>Municipal Water Districts</u>		<u>Cities</u>		<u>County Water Authority</u>
Calleguas	Las Virgenes	Anaheim	Los Angeles	San Diego ⁽¹⁾
Central Basin	Orange County	Beverly Hills	Pasadena	
Eastern	Three Valleys	Burbank	San Fernando	
Foothill	West Basin	Compton	San Marino	
Inland Empire Utilities Agency		Fullerton	Santa Ana	
Upper San Gabriel Valley		Glendale	Santa Monica	
Western of Riverside County		Long Beach	Torrance	

(1) The San Diego County Water Authority, currently Metropolitan’s largest customer, is a plaintiff in litigation challenging the allocation of costs to certain rates adopted by Metropolitan’s Board. See “METROPOLITAN REVENUES—Litigation Challenging Rate Structure” in this Appendix A.

Service Area

Metropolitan’s service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. When Metropolitan began delivering water in 1941, its service area consisted of approximately 625 square miles. Its service area has increased by 4,500 square miles since that time. The expansion was primarily the result of annexation of the service areas of additional member agencies.

Metropolitan estimates that approximately 18.5 million people lived in Metropolitan’s service area in 2014, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (“SCAG”) and the San Diego Association of Governments (“SANDAG”). Population projections prepared by SCAG in 2012 and SANDAG in 2010, as part of their planning process to update regional transportation and land use plans, show expected population growth of about 18 percent in Metropolitan’s service area between 2010 and 2035. The 2010 Census population estimates are incorporated into SCAG’s 2012 projections. The 2010 SANDAG regional growth projections do not incorporate the 2010 Census population estimates. The economy of Metropolitan’s service area is exceptionally diverse. In ~~2013~~2014, the economy of the six counties which contain Metropolitan’s service area had a gross domestic product larger than all but fifteen nations of the world. Metropolitan has historically provided between 40 and 60 percent of the water used annually within its service area. For additional economic and demographic information concerning the six county area containing Metropolitan’s service area, see Appendix E – “SELECTED DEMOGRAPHIC AND ECONOMIC INFORMATION FOR METROPOLITAN’S SERVICE AREA.”

The climate in Metropolitan’s service area ranges from moderate temperatures throughout the year in the coastal areas to hot and dry summers in the inland areas. Annual rainfall in an average year has historically been approximately 13 to 15 inches along the coastal area, up to 20 inches in foothill areas and less than 10 inches inland.

GOVERNANCE AND MANAGEMENT

Board of Directors

Metropolitan is governed by a 3738-member Board of Directors. Each member public agency is entitled to have at least one representative on the Board, plus an additional representative for each full five percent of the total assessed valuation of property in Metropolitan's service area that is within the member public agency. Changes in relative assessed valuation do not terminate any director's term. Accordingly, the Board may, from time to time, have more or fewer than 3738 directors.

The Board includes business, professional and civic leaders. Directors serve on the Board without compensation from Metropolitan. Voting is based on assessed valuation, with each member agency being entitled to cast one vote for each \$10 million or major fractional part of \$10 million of assessed valuation of property within the member agency, as shown by the assessment records of the county in which the member agency is located. The Board administers its policies through the Metropolitan Water District Administrative Code (the "Administrative Code"), which was adopted by the Board in 1977. The Administrative Code is periodically amended to reflect new policies or changes in existing policies that occur from time to time.

Management

Metropolitan's day-to-day management is under the direction of its General Manager, who serves at the pleasure of the Board, as do Metropolitan's General Counsel, General Auditor and Ethics Officer. Following is a biographical summary of Metropolitan's principal executive officers.

Jeffrey Kightlinger, General Manager – Mr. Kightlinger was appointed as General Manager in February 2006, leaving the position of General Counsel, which he had held since February 2002. Before becoming General Counsel, Mr. Kightlinger was a Deputy General Counsel and then Assistant General Counsel, representing Metropolitan primarily on Colorado River matters, environmental issues, water rights and a number of Metropolitan's water transfer and storage programs. Prior to joining Metropolitan in 1995, Mr. Kightlinger worked in private practice representing numerous public agencies including municipalities, redevelopment agencies and special districts. Mr. Kightlinger earned his bachelor's degree in history from the University of California, Berkeley, and his law degree from Santa Clara University.

Marcia Scully, General Counsel – Ms. Scully assumed the position of General Counsel in March 2012. She previously served as Metropolitan's Interim General Counsel from March 2011 to March 2012. Ms. Scully joined Metropolitan in 1995, after a decade of private law practice, providing legal representation to Metropolitan on construction, employment, Colorado River and significant litigation matters. From 1981 to 1985 she was assistant city attorney for the City of Inglewood. Ms. Scully served as president of University of Michigan's Alumnae Club of Los Angeles and is a recipient of the 1996 State Bar of California, District 7 President's Pro Bono Service Award and the Southern California Association of Non-Profit Housing Advocate of the Year Award. She is also a member of the League of Women Voters for Whittier and was appointed for two terms on the City of Whittier's Planning Commission, three years of which were served as chair. Ms. Scully earned a bachelor's degree in liberal arts from the University of Michigan, a master's degree in urban planning from Wayne State University and law degree from Loyola Law School.

Gerald C. Riss, General Auditor – Mr. Riss was appointed as Metropolitan's General Auditor in July 2002 and is responsible for the independent evaluation of the policies, procedures and systems of control throughout Metropolitan. Mr. Riss is a certified fraud examiner, certified financial services auditor and certified risk professional with more than 25 years of experience in accounting, audit and risk management. Prior to joining Metropolitan, Mr. Riss was Vice President and Assistant Division Head of Risk Management Administration at United California Bank/Bank of the West. He also served as Senior Vice President, director of Risk Management and General Auditor of Tokai Bank of California from 1988 until its

reorganization as United California Bank in 2001. He earned a bachelor's degree in accounting and master's degree in business administration from Wayne State University in Detroit, Michigan.

Deena Ghaly, Ethics Officer – Ms. Ghaly was appointed Ethics Officer in November 2012. Ms. Ghaly joined Metropolitan with over 20 years of legal and ethics-related experience. Prior to joining Metropolitan, she served as an administrative law judge for the California Office of Administrative Hearings. She previously was head of enforcement and general counsel for the Los Angeles City Ethics Commission, which administers and enforces the laws regarding campaign contributions, lobbying, and government ethics for the city of Los Angeles. Before moving to Southern California in 2001, Ms. Ghaly lived and worked in New York City, where she headed the labor department in the general counsel's office of a large city agency. Licensed to practice law in California, New York and New Jersey, Ms. Ghaly is knowledgeable in workplace investigations, government ethics, regulatory affairs, and labor and employment matters. She has lectured throughout the nation on various topics, including parallel criminal and administrative prosecution, due process in administrative procedures, and effective internal investigations. Ms. Ghaly earned a bachelor's degree in philosophy from Wellesley College in Massachusetts and a law degree from Cornell Law School.

Gary Breaux, Assistant General Manager/Chief Financial Officer – Mr. Breaux has had extensive experience working for local governments since 1983. From 1994 until joining Metropolitan in October 2011, he served as Director of Finance for East Bay Municipal Utility District (“EBMUD”). At EBMUD, he was responsible for all financial areas, including treasury operations, debt management, rates, internal audit, accounting and reporting, risk management and customer and community services. Prior to joining EBMUD, he was Director of Finance for the City of Oakland, California. A native of Colorado, Mr. Breaux received a Bachelor of Science degree in Business from the University of Colorado in 1977 and a master's degree in Public Administration in 1987 from Virginia Commonwealth University.

Debra Man, Assistant General Manager/Chief Operating Officer – Ms. Man was appointed to this position in December 2003. Ms. Man has worked at Metropolitan since 1986, beginning as an engineer and advancing to Chief of the Planning and Resources Division. As Chief of Planning and Resources she was responsible for major initiatives adopted by Metropolitan's Board, such as the Integrated Water Resources Plan, rate structure, and facility plans for expansion of Metropolitan's distribution system. In 1999, she was appointed as Vice President of Water Transfers and Exchanges, responsible for securing water supplies through agreements and partnerships with other water and agricultural interests in San Joaquin Valley and Southern California and demonstrating Metropolitan's water supply reliability in compliance with current laws. Ms. Man is a registered professional civil engineer in California and Hawaii. She has a master's degree in civil/environmental engineering from Stanford University and a bachelor's degree in civil engineering from the University of Hawaii.

Roger Patterson, Assistant General Manager/Strategic Initiatives – Mr. Patterson was appointed Assistant General Manager in March 2006. He is responsible for overseeing water supply and planning issues, including the Colorado River and State Water Project. He previously served as a consultant to Metropolitan on Colorado River issues. Mr. Patterson was the director of the Nebraska Department of Natural Resources from 1999 to 2005, where he was responsible for water administration, water planning, flood-plain delineation, dam safety and the state databank. Prior to his work in Nebraska, Mr. Patterson spent 25 years with the Bureau of Reclamation, retiring from the Bureau as the Regional Director for the Mid-Pacific Region. He is a registered professional engineer in Nebraska and Colorado, and earned bachelor's and master's degrees in engineering from the University of Nebraska.

~~*Gilbert F. Ivey, Fidencio M. Mares, Interim Assistant General Manager/Chief Administrative Officer*~~ – Mr. ~~Ivey~~~~Mares~~ is the ~~Interim Assistant General Manager~~/Chief Administrative Officer and is responsible for ~~human resources, real property management, strategic land development and Metropolitan's small business program.~~ ~~Mr. Ivey has been with Metropolitan for 40 years, starting as a summer trainee in the Engineering Division. He has held various positions in Finance, Right of Way and Land, Operation, Human Resources and Executive Offices. He earned a bachelor's degree in business administration from~~~~the strategic~~

direction and management of Metropolitan's administrative functions. His primary responsibilities include managing human resources, information technology, business outreach, real property and administrative services. Prior to joining Metropolitan, Mr. Mares was the owner of the Mares Company, where he served as a consultant to companies in the overall assessment of their management programs and processes. Prior to becoming a consultant, Mares worked both in the private and public sectors, serving as vice president of human resources and corporate communications for Beckham Coulter and as chief administrative officer of BHP/Pacific Resources and President & CEO of Gas Operations. He worked for more than 15 years for The Gas Company in Hawaii and Southern California Edison Company. A graduate of the California State University, Dominguez Hills and holds various professional designations and certifications in management from Pepperdine University and the University of Southern California. Mr. Ivy has announced his retirement, which is planned for June 2015. Fresno, he also serves on the National Board of Visitors (Distinguished Graduates) for the University.

Dee Zinke, Deputy General Manager/External Affairs – Ms. Zinke is responsible for Metropolitan's communications, outreach, education and legislative matters. She joined Metropolitan in 2009 as Manager of the Legislative Services Section. Before coming to Metropolitan, Ms. Zinke was the Manager of Governmental and Legislative Affairs at the Calleguas Municipal Water District for nearly 10 years, where she received recognition for her significant contributions to the Association of California Water Agencies, the Ventura County Special Districts Association and the Association of Water Agencies of Ventura County. During her tenure at Calleguas, she was named Chair of the Ventura County Watersheds Coalition and appointed by then-Secretary of Resources Mike Chrisman to the State Watershed Advisory Committee, a post she still holds today. Prior to her public service, she worked in the private sector as the Executive Officer and Senior Legislative Advocate for Building Industry Association of Greater Los Angeles and Ventura Counties and as Director of Communications for E-Systems, a defense contractor specializing in communication, surveillance and navigation systems in Washington, D.C. Ms. Zinke holds a Bachelor of Arts degree in Communication and Psychology from Virginia Polytechnic Institute and State University.

Employee Relations

The total number of regular full-time Metropolitan employees on May 15, 2015 was 1,761, of whom 1,223 were represented by AFSCME Local 1902, 93 by the Supervisors Association, 294 by the Management and Professional Employees Association and 135 by the Association of Confidential Employees. The remaining 16 employees are unrepresented. The four bargaining units represent 99 percent of Metropolitan's employees. The Memorandum of Understanding ("MOU") with the Association of Confidential Employees covers the period January 1, 2011 through December 31, 2015. The MOUs with the Management and Professional Employees Association and with AFSCME Local 1902 cover the period January 1, 2011 to December 31, 2016. The MOU with the Supervisors Association covers the period September 13, 2011 to December 31, 2016.

Risk Management

Metropolitan is exposed to various risks of loss related to the design, construction, treatment and delivery of water. With the assistance of third party claims administrators, Metropolitan is self-insured for liability, property and workers' compensation. Metropolitan self-insures the first \$25 million per liability occurrence, with commercial liability coverage of \$75 million in excess of the self-insured retention. The \$25 million self-insured retention is maintained as a separate restricted reserve. Metropolitan is also self-insured for loss or damage to its property, with the \$25 million self-insured retention also being accessible for emergency repairs and Metropolitan property losses. In addition, Metropolitan obtains other excess and specialty insurance coverage such as directors' and officers' liability, fiduciary liability and aircraft hull and liability coverage.

Metropolitan self-insures the first \$5 million for workers' compensation with statutory excess coverage ~~of \$50 million. Metropolitan separately funds remaining workers' compensation and general liability claims arising from the Diamond Valley Lake and early portions of the Inland Feeder construction~~

~~projects, which were insured through Owner Controlled Insurance Programs (“OCIPs”). The OCIPs for those projects have been concluded. The costs to settle and close the remaining claims for the Diamond Valley Lake and Inland Feeder construction projects are estimated to be \$1 million and \$300,000, respectively.~~ The self-insurance retentions and reserve levels currently maintained by Metropolitan may be modified by Metropolitan’s Board at its sole discretion.

METROPOLITAN’S WATER SUPPLY

Metropolitan’s principal sources of water supplies are the State Water Project and the Colorado River. Metropolitan receives water delivered from the State Water Project under State Water Contract provisions, including contracted supplies, use of carryover storage in San Luis Reservoir, and surplus supplies. See “—State Water Project” below. Metropolitan holds rights to a basic apportionment of Colorado River water and has priority rights to an additional amount depending on availability of surplus supplies. See “—Colorado River Aqueduct” below. Water management programs supplement these Colorado River supplies. Metropolitan stores State Water Project and Colorado River supplies in Metropolitan surface water reservoirs and through storage and water transfer agreements. See “—Water Transfer, Storage and Exchange Program” and “—Storage Capacity and Water in Storage” below.

Metropolitan faces a number of challenges in providing adequate, reliable and high quality supplemental water supplies for southern California. These include, among others: (1) population growth within the service area; (2) increased competition for low-cost water supplies; (3) variable weather conditions; ~~and~~ (4) increased environmental regulations; and (5) climate change. Metropolitan’s resources and strategies for meeting these long-term challenges are set forth in its Integrated Water Resources Plan, as updated from time to time. See “—Integrated Water Resources Plan” below. In addition, Metropolitan manages water supplies in response to the prevailing hydrologic conditions by implementing its Water Surplus and Drought Management Plan, and in times of prolonged or severe shortages, the Water Supply Allocation Plan. See “—Water Surplus and Drought Management Plan” and “—Water Supply Allocation Plan” below.

~~Hydrologic conditions can have a significant impact on Metropolitan’s water supply. California hydrology is highly variable from year to year, which impacts deliveries to Metropolitan from the State Water Project. In 2011, California’s snowpack peaked at 163 percent of normal. However, drier conditions returned for 2012 and California statewide snowpack peaked at 64 percent of normal. After large storms in November and December of 2012, California started 2013 with above normal snowpack conditions for the State. However, the California 2013 snowpack peaked at 61 percent of normal, and associated runoff was 65 percent of normal. Calendar year 2013 was the driest on record in much of California. Due to these record dry conditions and lower than average water levels in State reservoirs, Governor Brown proclaimed a drought emergency on January 17, 2014. The 2014 snowpack peaked at 35 percent of normal in April 2014 and associated runoff was 41 percent of normal, the fourth lowest in history. As a result of the persistent dry conditions, Governor Brown issued an executive order on April 25, 2014, strengthening the State’s authority to respond to the drought. The executive order expedites approvals of water transfers and exchanges, eases some environmental compliance requirements for drought response actions, and calls upon businesses and homeowners to limit potable water consumption, especially for landscaping.~~ two principal imported water supply sources. For Metropolitan’s State Water Project supplies, precipitation in California’s northern Sierra Nevada during the fall and winter helps replenish storage levels in Lake Oroville, a key State Water Project facility. The subsequent runoff from the spring snowmelt helps satisfy regulatory requirements in the San Francisco Bay\Sacramento-San Joaquin River Delta (“Bay-Delta”) bolstering water supply reliability in the same year. See “—State Water Project— Endangered Species Act Considerations” below. The source of Metropolitan’s Colorado River supplies is primarily the watersheds of the Upper Colorado River basin in the states of Colorado, Utah, and Wyoming. Although precipitation is primarily observed in the winter and spring, summer storms are common and can affect water supply conditions.

In 2015, statewide California snowpack peaked in January at 17 percent of normal. This was the earliest peak and lowest snowpack in recorded history, suggesting resulting in the fourth year of drought in California. Storage levels in state reservoirs remain below normal, including storage levels in Lake Oroville, the principal State Water Project reservoir, and San Luis Reservoir, a critical reservoir south of the ~~San Francisco Bay\~~Sacramento-San Joaquin River Delta (“Bay-Delta”). Consequently, the northern Sierra runoff forecast for water year 2014-15 (October 1 – September 30) is projected to be 49% of normal. For calendar year 2015, ~~DWR’s~~the California Department of Water Resources’ (“DWR”) initial allocation to State Water Contractors on December 1, 2014 was 10 percent. On March 2, 2015, DWR increased the State Water Project allocation to 20 percent of contracted amounts. This allocation represents supplies that DWR has already exported and either delivered or stored in San Luis Reservoir. It does not assume additional forecasted supplies. ~~DWR’s recent State Water Project analysis indicates that an additional increase in the 2015 State Water Project allocation is possible, but the final~~With no significant improvements in the State’s hydrology since March, the final State Water Project allocation for 2015 is unlikely to be more than 25 percent or belowexpected to remain at 20 percent ~~of contracted amounts.~~ See “—State Water Project—General” below.

~~Metropolitan’s other principal source of water supply, the Colorado River, comes primarily from watersheds of the Upper Colorado River basin in the states of Colorado, Utah, and Wyoming. Due to the way that Colorado River supplies are apportioned, snowpack and runoff levels do not impact Metropolitan water supplies in the current year. Instead, snowpack and runoff impact storage levels at Lake Powell and Lake Mead, which in turn affect the likelihood of surplus or shortage conditions in the future.—~~

~~As of May 1, In 2015, precipitation in the upper~~the Upper Colorado River Basin ~~was 79 percent of normal, with snowpack at 82 percent of normal for water year 2014-15 (October 1—September 30), resulting in a forecasted unregulated inflow to Lake Powell of approximately 59 percent of normal.—As of May 18, snowpack peaked in March at 76 percent of normal. However, the Upper Colorado River Basin runoff measured 94% of normal due to above normal precipitation in the basin in May, June and July, which averted Colorado River shortage conditions in 2016 and allowed Metropolitan to implement new water management programs in 2015. As of September 20,~~ 2015, total system storage in the Colorado River Basin was 4851 percent of capacity. See “—Colorado River Aqueduct” below.

Uncertainties from potential future temperature and precipitation changes in a climate driven by increased concentrations of atmospheric carbon dioxide also present challenges. Areas of concern to California water planners identified by researchers include: reduction in Sierra Nevada and Colorado Basin snowpack; increased intensity and frequency of extreme weather events; and rising sea levels resulting in increased risk of damage from storms, high-tide events, and the erosion of levees and potential cutbacks of deliveries ~~from the State Water Project~~of imported water. While potential impacts from climate change remain subject to study and debate, climate change is among the uncertainties that Metropolitan seeks to address through its planning processes.

Drought Response Actions

~~At this time, it is not possible to forecast the impact of the current California drought on Metropolitan water supplies.—Metropolitan’s 2014 year-end overall water storage was approximately 1.8 million acre feet.—In 2014, Metropolitan utilized supplies from the Colorado River and storage to~~To offset reductions in State Water Project supplies and mitigate impacts of the California drought.—Metropolitan has utilized supplies from the Colorado River and storage reserves, and is also encouraging responsible and efficient water use to lower demands. ~~Since Governor Brown’s January 2014~~

Metropolitan is prepared to meet water demands in its service area through calendar year 2016 using a combination of State Water Project and CRA deliveries, storage reserves and supplemental water transfers and purchases. Through 2015, the CRA is anticipated to operate near capacity. Operations to distribute Colorado River supplies into areas normally served by State Water Project supplies began in 2014. These

measures have offset the low 2015 State Water Project supply allocation. Approximately 120 thousand acre-feet were withdrawn from dry-year storage reserves in the first six months of 2015, leaving 1.72 million acre-feet in storage reserves as of July 1, 2015. (An acre-foot is the amount of water that will cover one acre to a depth of one foot and equals approximately 326,000 gallons, which represents the needs of two average families in and around the home for one year.) Metropolitan staff estimates that the storage reserve level as of December 31, 2015 will be 1.36 million acre-feet.

On April 1, 2015, Governor Brown issued an Executive Order (“Order”) calling for a 25 percent reduction in consumer water use in response to the historically dry conditions throughout the State of California. As a wholesale water agency providing a supplemental water supply to its member agencies, Metropolitan is not subject to the requirements of the Governor’s Order, which applies to retail water agencies, however Metropolitan’s member agencies will need to reduce their water sales in order to comply with the Order. Metropolitan also relies upon its Water Surplus and Drought Management (“WSDM”) Plan to identify resource actions in times of shortage and its Water Supply Allocation Plan for equitable distribution of available water supplies in case of extreme shortages. On April 14, 2015, the Board declared the implementation of the Water Supply Allocation Plan at a Level 3 Regional Shortage Level for the allocation year, effective July 1, 2015 through June 30, 2016. Implementation of the Water Supply Allocation Plan at a Level 3 Regional Shortage Level and the Governor’s Order are anticipated to reduce supplies delivered by Metropolitan to Metropolitan’s member agencies in fiscal year 2015-16 to approximately 1.6 million acre-feet. See “—Storage Capacity and Water in Storage,” “—Water Conservation,” “—Water Surplus and Drought Management Plan” and “—Water Supply Allocation Plan” below.

In addition, since Governor Brown’s initial drought emergency proclamation, in January 2014, Metropolitan has worked proactively with its member agencies to conserve water supplies in its service area. In February 2014, Metropolitan declared a Water Supply Alert, calling upon local cities and water agencies to immediately implement extraordinary conservation measures and institute local drought ordinances, and significantly expanded its water conservation and outreach programs and increased funding for conservation incentive programs by \$60 million, for a total of \$100 million for fiscal years 2014-15 and 2015-16. Metropolitan has also increased incentives for large landscape customers to convert from potable water to recycled water for irrigation. See “—Water Conservation” below. In May 2015, due to the strong response to the water conservation incentive programs, especially the turf replacement program, Metropolitan increased funding for these programs by \$350 million, for total funding of \$450 million over fiscal years 2014-15 and 2015-16. ~~Funding~~ On May 26, 2015, Metropolitan’s Board approved the funding for this increase ~~will come~~ from the remaining balance in the Water Management Fund ~~(of \$140 million)~~, the projected amounts over target financial reserve levels for fiscal year 2014-15 ~~(of \$160 million)~~, and the remaining balance in the Water Stewardship Fund ~~(of \$50 million)~~. This is a one-time only increase to the conservation incentive program, and it is expected to result in 172 million square feet of turf removed and water savings of ~~80 thousand~~ 800,000 acre feet annually over the next ten years. Funding of this program in future years will be determined as part of the next biennial budget and rates process in ~~Spring~~ spring 2016.

~~Metropolitan is prepared to meet water demands in its service area in calendar year 2015 using a combination of CRA deliveries, storage reserves and supplemental water transfers and purchases. In 2015, the CRA is anticipated to operate near capacity, assuming additional supplies are acquired, and operations to distribute Colorado River supplies into areas normally served by State Water Project supplies that began in 2014 are expected to continue in 2015. These measures will offset the initial State Water Project supply allocations in 2015. Metropolitan also relies upon its Water Surplus and Drought Management (“WSDM”) Plan to identify resource actions in times of shortage and its Water Supply Allocation Plan for equitable distribution of available water supplies in case of extreme shortages. On April 14, 2015, the Board declared the implementation of the Water Supply Allocation Plan at a Level 3 Regional Shortage Level, effective July 1, 2015 through June 30, 2016. Implementation of the Water Supply Allocation Plan at a Level 3 Regional Shortage Level is anticipated to reduce supplies delivered by Metropolitan to Metropolitan’s member agencies by 15 percent and water sales to approximately 1.8 million acre feet. See “—Storage Capacity and~~

~~Water in Storage,” “Water Conservation,” “Water Surplus and Drought Management Plan” and “Water Supply Allocation Plan” below.~~

~~On April 1, 2015, Governor Brown issued an Executive Order (“Order”) calling for a 25 percent reduction in consumer water use in response to the historically dry conditions throughout the State of California. As a wholesale water agency, Metropolitan is not subject to the requirements of the Governor’s Order, which applies to retail water agencies. Furthermore, the Order to reduce statewide water use by 25 percent is not expected to result in an equivalent reduction in Metropolitan’s sales. Metropolitan’s member agencies will need to reduce their water sales in order to comply with the Order, but due to diminished local supplies the member agencies are expected to purchase all of the amount of water allocated to them under Metropolitan’s Water Supply Allocation Plan. Therefore, Metropolitan’s Water Supply Allocation Plan is expected to better reflect the extent to which Metropolitan’s water deliveries may be reduced in fiscal year 2015-16 than is the Governor’s Order to reduce water use statewide by 25 percent.~~

~~Metropolitan’s financial reserve policy provides funds to manage through periods of reduced sales. See “METROPOLITAN REVENUES—Financial Reserve Policy.” In years when actual sales are less than projections, Metropolitan uses various tools to manage reductions in revenues, such as reducing expenditures below budgeted levels, reducing funding of capital from revenues, and drawing on reserves. In years when actual sales exceed projections, the revenues from water sales during the fiscal year will exceed budget, potentially resulting in an increase in financial reserves. On April 8, 2014, Metropolitan’s Board approved multiple uses of certain unrestricted reserves over the target level on June 30, 2014, which included a deposit of \$232 million to a Water Management Fund, which will cover costs associated with replenishing storage, purchasing transfers and funding drought response and conservation related programs. See “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Revenues” in this Appendix A.~~

Integrated Water Resources Plan

The Integrated Water Resources Plan (“IRP”) is Metropolitan’s principal water resources planning document. Metropolitan, its member agencies, sub-agencies and groundwater basin managers developed their first IRP as a long-term planning guideline for resources and capital investments. The purpose of the IRP was the development of a portfolio of preferred resources (see “—The Integrated Resources Plan Strategy” below) to meet the water supply reliability and water quality needs for the region in a cost-effective and environmentally sound manner. The first IRP was adopted by the Board in January 1996 and was updated in 2004 and 2010.

On October 12, 2010, Metropolitan’s Board adopted an IRP update (the “2010 IRP Update”) as a strategy to set goals and a framework for water resources development. This strategy enables Metropolitan and its member agencies to manage future challenges and changes in California’s water conditions and to balance investments with water reliability benefits. The 2010 IRP Update provides an adaptive management approach to address future uncertainty, including uncertainty from climate change. It was formulated with input from member agencies, retail water agencies, and other stakeholders including water and wastewater managers, environmental and business interests and the community. The framework places an emphasis on regional collaboration.

The 2010 IRP Update seeks to provide regional reliability through 2035 by stabilizing Metropolitan’s traditional imported water supplies and continuing to develop additional local resources, with an increased emphasis on regional collaboration. It also advances long-term planning for potential future contingency resources, such as storm water capture and large-scale seawater desalination, in close coordination with Metropolitan’s 26 member agencies and other utilities. Metropolitan is updating the IRP, which is in two phases. The first phase is a technical update scheduled to be completed at the end of 2015. The second phase is development of implementation policy scheduled to begin at the conclusion of the technical update process.

~~The 2010 IRP Update approach serves as a foundation for the current IRP update process. The 2010 IRP Update, and all of the materials associated with the current IRP update process, are available on Metropolitan's web site at <http://www.mwdh2o.com/mwdh2o/pages/yourwater/irp/>.~~ Specific projects that may be developed by Metropolitan in connection with the implementation of the IRP will be subject to future Board consideration and approval, as well as environmental and regulatory documentation and compliance. [The 2010 IRP Update, and all of the materials associated with the current IRP update process can be found on Metropolitan's website at \[www.mwdh2o.com/PDF_About_Your_Water/2.4.1_Integrated_Resources_Plan.pdf\]\(http://www.mwdh2o.com/PDF_About_Your_Water/2.4.1_Integrated_Resources_Plan.pdf\).](http://www.mwdh2o.com/PDF_About_Your_Water/2.4.1_Integrated_Resources_Plan.pdf) The information set forth on Metropolitan's website is not incorporated by reference.

The Integrated Resources Plan Strategy

The IRP Strategy identifies a balance of local and imported water resources within Metropolitan's service area. Metropolitan expects that the core resource strategy, uncertainty buffers and foundational actions in the IRP Strategy will be continually reviewed and updated at least every five years to reflect changing demand and supply conditions. Foundational actions include technical studies and research (up to pilot projects, but not full-scale projects) that enable timely, future implementation of challenging resources, including, but not limited to, recycled water, seawater desalination, stormwater capture, and groundwater enhancement.

The following paragraphs describe several elements of the IRP Strategy.

State Water Project. The State Water Project is one of Metropolitan's two major sources of water. In addition to municipal and industrial use of this core supply, State Water Project supplies are important for maximizing local groundwater potential and the use of recycled water since State Water Project water has lower salinity content than CRA water and can be used to increase groundwater conjunctive use applications. See "—State Water Project" below and "REGIONAL WATER RESOURCES—Local Water Supplies" in this Appendix A.

Colorado River Aqueduct. The CRA delivers water from the Colorado River, Metropolitan's original source of supply. Metropolitan has helped to fund and implement ~~farm and irrigation district~~[agricultural](#) conservation programs, improvements to river operation facilities, land management programs and water transfers and exchanges through agreements with agricultural water districts in southern California and entities in Arizona and Nevada that use Colorado River water. See "—Colorado River Aqueduct" below.

Water Conservation. Conservation and other water use efficiencies are integral components of Metropolitan's IRP. Metropolitan has invested in conservation programs since the 1980s. Historically, most of the investments have been in water efficient fixtures in the residential sector. Metropolitan has offered outdoor water conservation programs in both the residential and commercial sectors since the 1990s, but since the end of California's last drought in 2010, Metropolitan has increased its conservation efforts targeting outdoor water use in these sectors. See "—Water Conservation" below.

Recycled Water. Reclaimed or recycled municipal and industrial water is a valuable water resource and can be used for landscape irrigation, agriculture, protecting groundwater basins from saltwater intrusion, industrial processes, and recharging local aquifers. Metropolitan offers financial incentives to member agencies for developing economically viable reclamation projects. See "REGIONAL WATER RESOURCES—Local Water Supplies" in this Appendix A.

Conjunctive Use. Conjunctive use is the coordinated use of surface water supplies and groundwater storage. It entails storing surplus imported water during the winter months or wet years in local surface reservoirs and recharging local groundwater basins, then using the stored supplies during dry months and droughts. See "REGIONAL WATER RESOURCES—Local Water Supplies" in this Appendix A.

Water Transfers and Exchanges. Under voluntary water transfer, ~~acquisition~~ or exchange agreements, agricultural communities using irrigation water may periodically sell or conserve some of their water allotments for use in urban areas. The water may be delivered through existing State Water Project or CRA facilities, or may be exchanged for water that is delivered through such facilities. Metropolitan’s policy toward potential transfers states that the transfers will be designed to protect and, where feasible, enhance environmental resources and avoid the mining of local groundwater supplies. See “—Water Transfer, Storage and Exchange Programs” below.

Groundwater Recovery. Natural groundwater reservoirs serve an important function as storage facilities for local and imported water. In cases where groundwater storage has become contaminated, water agencies have to rely more heavily on imported water supplies. Treatment for polluted groundwater is quite costly and poses environmental challenges. Metropolitan offers financial incentives to help fund member agency groundwater recovery projects. See “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

Seawater Desalination. Seawater desalination is the process of removing salts from ocean water to produce potable supplies. It is a potential new local supply that could help increase supply reliability in Metropolitan’s service area. Metropolitan offers financial incentives to member agencies for seawater desalination projects through its Seawater Desalination Program and Local Resource Program ~~(“LRP”).~~ Currently, The first large-scale seawater desalination project is projected to come online by the end of 2015 in San Diego County, and there are a number of other seawater desalination projects either under development or in the planning phase within Metropolitan’s service area. See “REGIONAL WATER RESOURCES—Local Water Supplies” and “METROPOLITAN REVENUES—Rate Structure” in this Appendix A.

State Water Project

General. One of Metropolitan’s two major sources of water is the State Water Project, which is owned by the State and operated by DWR. This project transports Feather River water stored in and released from Oroville Dam and unregulated flows diverted directly from the Bay-Delta south via the California Aqueduct to four delivery points near the northern and eastern boundaries of Metropolitan’s service area. The total length of the California Aqueduct is approximately 444 miles.

In 1960, Metropolitan signed a water supply contract (as amended, the “State Water Contract”) with DWR. Metropolitan is one of 29 agencies that have long-term contracts for water service from DWR, and is the largest agency in terms of the number of people it serves (approximately 18.5 million), the share of State Water Project water that it has contracted to receive (approximately 46 percent), and the percentage of total annual payments made to DWR by agencies with State water contracts (approximately 54 percent for 2014). For information regarding Metropolitan’s obligations under the State Water Contract, see “METROPOLITAN EXPENDITURES—State Water Contract Obligations” in this Appendix A. Upon expiration of the State Water Contract term (currently in 2035), Metropolitan has the option to continue service under substantially the same terms and conditions. Metropolitan and other agencies with state water supply contracts are currently in negotiations with DWR to extend the State Water Contract. In June 2014, DWR and the State Water Project Contractors reached an Agreement in Principle (“AIP”) to extend the contract to 2085 and to make certain changes related to financial management of the State Water Project in the future. The AIP will serve as the “proposed project” for purposes of environmental review under the California Environmental Quality Act (“CEQA”). DWR issued a Notice of Preparation of an Environmental Impact Report (“EIR”) for the proposed project on September 14, 2014. Following CEQA review, a State Water Project amendment will be prepared. Such amendment will be subject to review by the Legislature.

The State Water Contract, under a 100 percent allocation, provides Metropolitan 1,911,500 acre-feet of water. ~~(An acre foot is the amount of water that will cover one acre to a depth of one foot and equals~~

~~approximately 326,000 gallons, which represents the needs of two average families in and around the home for one year.)~~—The 100 percent allocation is referred to as the contracted amount. Late each year, DWR announces an initial allocation estimate for the upcoming year, but may revise the estimate throughout the year if warranted by developing precipitation and water supply conditions. From calendar years 2004 through 2014, the amount of water received by Metropolitan from the State Water Project, including water from water transfer, groundwater banking and exchange programs delivered through the California Aqueduct, described below under “—Water Transfer, Storage and Exchange Programs,” varied from a low of 607,000 acre-feet in calendar year 2014 to a high of 1,800,000 acre-feet in 2004.

In calendar year 2013, DWR’s allocation to State Water Project Contractors was 35 percent of contracted amounts, or 669,000 acre-feet of Metropolitan’s 1,911,500 acre-foot contractual amount. In addition, Metropolitan began 2013 with approximately 281,000 acre-feet of carryover supplies from prior years. In calendar year 2014, DWR’s allocation to State Water Project Contractors was five percent of contracted amounts, or 95,575 acre-feet. ~~In addition,~~ Metropolitan used all of its 223,000 acre-feet of carryover supplies from prior years, but was able to carry over ~~32,000~~36,000 acre-feet of unused 2014 State Water Project supplies which will be available for use in 2015. See “—Water Transfer, Storage and Exchange Programs” and “—Storage Capacity and Water in Storage” below.

For calendar year 2015, DWR’s initial allocation estimate to State Water Project Contractors was announced on December 1, 2014, as 10 percent of contracted amounts. Due to December 2014 and February 2015 storm runoff and storage in the State’s major reservoirs, this allocation was increased on January 15, 2015 to 15 percent of contracted amounts, and increased again on March 2, 2015 to 20 percent, or 382,000 acre-feet. This allocation reflects a critically dry fourth consecutive year of drought, low storage levels in the State’s major reservoirs, and federally mandated environmental restrictions which have been imposed upon water deliveries from the Bay Delta, including the biological opinions as discussed below. As in previous dry years, Metropolitan is augmenting these deliveries using withdrawals from its storage programs along the State Water Project and through water transfer and exchange programs. See “METROPOLITAN’S WATER SUPPLY—Water Transfer, Storage and Exchange Programs” in this Appendix A.

Endangered Species Act Considerations

General. The listing of several fish species as threatened or endangered under the federal or California Endangered Species Acts (respectively, the “Federal ESA” and the “California ESA” and, collectively, the “ESAs”) have adversely impacted State Water Project operations and limited the flexibility of the State Water Project. Currently, five species (the winter-run and spring-run Chinook salmon, Delta smelt, North American green sturgeon and Central Valley steelhead) are listed under the ESAs. In addition, on June 25, 2009, the California Fish and Game Commission declared the longfin smelt a threatened species under the California ESA.

The Federal ESA requires that before any federal agency authorizes funds or carries out an action it must consult with the appropriate federal fishery agency to determine whether the action would jeopardize the continued existence of any threatened or endangered species, or adversely modify habitat critical to the species’ needs. The result of the consultation is known as a “biological opinion.” In the biological opinion the federal fishery agency determines whether the action would cause jeopardy to a threatened or endangered species or adverse modification to critical habitat and recommends reasonable and prudent alternatives or measures that would allow the action to proceed without causing jeopardy or adverse modification. The biological opinion also includes an “incidental take statement.” The incidental take statement allows the action to go forward even though it will result in some level of “take,” including harming or killing some members of the species, incidental to the agency action, provided that the agency action does not jeopardize the continued existence of any threatened or endangered species and complies with reasonable mitigation and minimization measures recommended by the federal fishery agency.

Delta Smelt and Salmon Federal ESA Biological Opinions. The United States Fish and Wildlife Service released a biological opinion on the impacts of the State Water Project and Central Valley Project on Delta smelt on December 15, 2008. ~~Metropolitan and seven other entities filed separate lawsuits challenging the biological opinion. These lawsuits were consolidated under the caption *Delta Smelt Consolidated Cases*.~~

~~The 2008 biological opinion on delta smelt contains water supply restrictions that could have a range of impacts on Metropolitan's deliveries from the State Water Project depending on hydrologic conditions. See "*State Water Project - General*," above and "*State Water Project Operational Constraints*," below. On March 13, 2014, the Ninth Circuit held that the 2008 biological opinion is valid and lawful. On June 4, 2009, the National Marine Fisheries Service released a biological opinion for salmonid species. The 2009 salmonid species biological opinion contains additional restrictions on State Water Project and Central Valley Project operations. Six lawsuits were filed challenging the 2009 salmon biological opinion and were consolidated under the caption *Consolidated Salmon Cases*. On December 22, 2014, the Ninth Circuit held that the 2009 biological opinion is valid and lawful. The National Marine Fisheries Service calculated that these restrictions will reduce the amount of water the State Water Project and Central Valley Project combined will be able to export from the Bay Delta by five to seven percent. DWR had estimated a 10 percent average water loss under this biological opinion. [These biological opinions on delta smelt and salmonid species contain water supply restrictions that could have a range of impacts on Metropolitan's deliveries from the State Water Project, depending on hydrologic conditions.](#) See "*State Water Project Operational Constraints*" below for the [estimated discussion on](#) impact to Metropolitan's water supply. See "*State Water Project - General*," above and "*State Water Project Operational Constraints*," below.~~

California ESA Litigation. In addition to the litigation under the Federal ESA, other environmental groups sued DWR on October 4, 2006 in the Superior Court of the State of California for Alameda County alleging that DWR was "taking" listed species without authorization under the California ESA. This litigation (*Watershed Enforcers, a project of the California Sportfishing Protection Alliance v. California Department of Water Resources*) requested that DWR be mandated to either cease operation of the State Water Project pumps, which deliver water to the California Aqueduct, in a manner that results in such "taking" of listed species or obtain authorization for such "taking" under the California ESA. On April 18, 2007, the Alameda County Superior Court issued its Statement of Decision finding that DWR was illegally "taking" listed fish through operation of the State Water Project export facilities. The Superior Court ordered DWR to "cease and desist from further operation" of those facilities within 60 days unless it obtained take authorization from the California Department of Fish and Game.

DWR appealed the Alameda County Superior Court's order on May 7, 2007. This appeal stayed the order pending the outcome of the appeal. The Court of Appeal stayed processing of the appeal in 2009 to allow time for DWR to obtain incidental take authorization for the Delta smelt and salmon under the California ESA, based on the consistency of the federal biological opinions with California ESA requirements ("Consistency Determinations"). After the California Department of Fish & Game issued the Consistency Determinations under the California ESA, authorizing the incidental take of both Delta smelt and salmon, appellants DWR and State Water Contractors dismissed their appeals of the *Watershed Enforcers* decision. The Court of Appeal subsequently issued a decision finding that DWR was a "person" under the California ESA and subject to its take prohibitions, which was the only issue left in the case. The State Water Contractors and Kern County Water Agency have filed suit in state court challenging the Consistency Determinations under the California ESA that have been issued for both Delta smelt and salmon. Those lawsuits challenging the Consistency Determinations have been stayed and are awaiting the final rulings in federal court regarding the validity of the Delta smelt and salmon biological opinions. —See "*Delta Smelt and Salmon Federal ESA Litigation*" above.

State Water Project Operational Constraints. DWR has altered the operations of the State Water Project to accommodate species of fish listed under the ESAs. These changes in project operations have adversely affected State Water Project deliveries. The impact on total State Water Project deliveries attributable to the Delta smelt and salmonid species biological opinions combined is estimated to be one

million acre-feet in an average year, reducing State Water Project deliveries from approximately 3.3 million acre-feet to approximately 2.3 million acre-feet for the year under average hydrology, and are estimated to range from 0.3 million acre-feet during critically dry years to 1.3 million acre-feet in above normal water years. State Water Project deliveries to contractors for calendar years 2008 through 2014 were reduced by a total of approximately 3.0 million acre-feet as a result of pumping restrictions. Pumping restrictions impacting the State Water Project allocation for calendar year 2014 reduced exports by approximately 100,000 acre-feet.

Operational constraints likely will continue until long-term solutions to the problems in the Bay-Delta are identified and implemented. In 2006, multiple state and federal resource agencies, water agencies, and stakeholder groups entered into a Planning Agreement for the Bay Delta Conservation Plan (BDCP). The basic, underlying purpose of the BDCP is to restore and protect Delta water supply, water quality, and ecosystem health within a stable regulatory environment. State and federal resource agencies and various environmental and water user entities ~~are currently engaged in the development of the Bay Delta Conservation Plan, which is aimed at addressing ecosystem needs and securing long-term operating permits for the State Water Project, and includes the Delta Habitat Conservation and Conveyance Program (“DHCCP”) (together, the “BDCP”)~~entered into a Planning Agreement for the development of the BDCP. The BDCP project’s current efforts consist of the preparation of the environmental documentation and preliminary engineering design for ~~Bay-Delta~~the proposed water conveyance improvements and related ~~habitat conservation~~mitigation measures ~~under the BDCP~~. These programs are discussed further under “—*Bay-Delta Regulatory and Planning Activities*” below.

Other issues, such as the decline of some fish populations in the Bay-Delta and surrounding regions and certain operational actions in the Bay-Delta, may significantly reduce Metropolitan’s water supply from the Bay-Delta. State Water Project operational requirements may be further modified under new biological opinions for listed species under the Federal ESA or by the California Department of Fish and Game’s issuance of incidental take authorizations under the California ESA. Biological opinions or incidental take authorizations under the Federal ESA and California ESA might further adversely affect State Water Project and Central Valley Project operations. Additionally, new litigation, listings of additional species or new regulatory requirements could further adversely affect State Water Project operations in the future by requiring additional export reductions, releases of additional water from storage or other operational changes impacting water supply operations. Metropolitan cannot predict the ultimate outcome of any of the litigation or regulatory processes described above but believes they could have a materially adverse impact on the operation of State Water Project pumps, Metropolitan’s State Water Project supplies and Metropolitan’s water reserves.

Bay-Delta Regulatory and Planning Activities. The State Water Resources Control Board (“SWRCB”) is the agency responsible for setting water quality standards and administering water rights throughout California. Decisions of the SWRCB can affect the availability of water to Metropolitan and other users of State Water Project water. The SWRCB exercises its regulatory authority over the Bay-Delta by means of public proceedings leading to regulations and decisions. These include the Bay-Delta Water Quality Control Plan (“WQCP”), which establishes the water quality objectives and proposed flow regime of the estuary, and water rights decisions, which assign responsibility for implementing the objectives of the WQCP to users throughout the system by adjusting their respective water rights. The SWRCB is required by law to periodically review its WQCP to ensure that it meets the changing needs of this complex system.

Since 2000, SWRCB’s Water Rights Decision 1641 (“D-1641”) has governed the State Water Project’s ability to export water from the Bay-Delta for delivery to Metropolitan and other agencies receiving water from the State Water Project. D-1641 allocated responsibility for meeting flow requirements and salinity and other water quality objectives established earlier by the WQCP. The SWRCB also identified additional issues to review, which could result in future changes in water quality objectives and flows that could affect exports of water from the State Water Project. Currently, the SWRCB is reviewing salinity objectives in the Bay-Delta intended to protect Bay-Delta farming and inflow requirements upstream of the

Delta to protect aquatic species. DWR and the Bureau of Reclamation filed ~~a petition on January 29, 2014,~~petitions in 2014 and 2015 requesting changes to D-1641 terms that govern outflows in the Bay-Delta. The SWRCB approved temporary urgency changes in the required outflows into the Bay-Delta ~~on January 31, 2014,~~in 2014 and 2015, enabling water to be conserved in reservoirs in case of continued drought. The temporary urgency changes also permit flexible operation of gates that typically remain closed during the late winter and spring to protect fish. Instead, gates may be operated based on evolving water quality conditions and fish migration information, which will enable greater protection against salt water intrusion to the interior portion of the Bay-Delta while protecting fish populations.

Bay-Delta Planning Activities. In 2000, several State and federal agencies released the CALFED Bay Delta Programmatic Record of Decision (“ROD”) and Environmental Impact Report/Environmental Impact Statement (“EIR/EIS”) that outlined a 30-year plan to improve the Delta’s ecosystem, water supply reliability, water quality, and levee stability. The CALFED ROD remains in effect and many of the state, federal, and local projects begun under CALFED continue. However, implementation is now coordinated through the Delta Stewardship Council.

Building on CALFED and other Bay-Delta planning activities, in 2006 multiple State and federal resource agencies, water agencies, and other stakeholder groups entered into a planning agreement for the ~~Bay-Delta Conservation Plan (“BDCP”).~~ The BDCP ~~is being developed~~was originally conceived as a comprehensive conservation strategy for the Bay-Delta designed to restore and protect ecosystem health, water supply, and water quality within a stable regulatory framework. The BDCP ~~would result in long-term permits~~was intended to be implemented over a 50-year time frame with corresponding long-term permit authorizations from fish and wildlife regulatory agencies ~~in return for meeting the Bay-Delta’s ecological needs.~~ ~~Implementation of the BDCP would occur over a 50-year time frame.~~ ~~The BDCP is intended to create a durable regulatory framework that would allow for fundamental and systematic improvements to water supply reliability and the Bay-Delta’s ecosystem health.~~

On July 25, 2012, Governor Jerry Brown and Secretary of the Interior Ken Salazar announced key proposed elements to advance the BDCP planning process, including proposed new water conveyance improvements. As discussed below, the water conveyance improvements would consist of three new water diversion facilities on the Sacramento River and two tunnels with a total capacity of 9,000 cubic-feet per second (“cfs”).

~~The draft BDCP,~~A draft BDCP Environmental Impact Report/Environmental Impact Statement (EIR/EIS) and draft Implementing Agreement were made available for public review and comment in December 2013. ~~A revised draft EIR/EIS is currently being prepared and will be released for public review in summer 2015.~~ By July 2014, at the end of the public review period, the lead agencies had received numerous comments on the proposed BDCP from other agencies and members of the public. In general, the strategy presented in the draft EIR/EIS of a long-term, comprehensive conservation plan for the Delta raised concerns in issuing 50-year permits because of uncertainties such as climate change and perceived difficulties in implementing and assessing the long-term benefits of large-scale habitat. To address these and other concerns, the state and federal lead agencies decided to consider an alternative implementation strategy and new alternatives associated with that strategy. In this alternative approach, DWR and Reclamation would implement planned water conveyance improvements as a stand-alone project termed California WaterFix that would seek incidental take authorization for a period of far less than 50 years, and would include only limited amounts of habitat restoration. Preliminary cost estimates for this project alternative are approximately \$17 billion. When a decision selecting the final project has been made, costs will be updated and allocated. Metropolitan anticipates that it could bear approximately 25 percent of the costs of the project. A Partially Recirculated Draft EIR/Supplemental Draft EIS for the revised BDCP/CA WaterFix alternatives has been circulated for public review. The public comment period ends on October 30, 2015. The final planning documents are expected to be completed in the spring of 2016.

The Sacramento-San Joaquin Delta Reform Act (“Reform Act”), passed in 2009, made it state policy to manage the Delta in support of the coequal goals of water supply reliability and ecosystem restoration in a manner that acknowledges the evolving nature of the Bay-Delta as a place for people and communities. The Reform Act created the Delta Stewardship Council and empowered it to develop a comprehensive management plan (the “Delta Plan”). State and local agencies proposing certain actions or projects in the Bay-Delta are required to certify for the Delta Stewardship Council that those efforts are consistent with the Delta Plan. ~~The~~ If approved, the BDCP is intended to be incorporated into the Delta Plan once environmental approvals and requirements are met.

~~On May 24, 2013, the San Luis & Delta Mendota Water Authority and Westlands Water District filed litigation in Sacramento Superior Court challenging the adequacy of the Program EIR under CEQA, and alleged that the Delta Plan is invalid because, among other things, it is inconsistent with the Delta Reform Act of 2009. On June 14, 2013, several different actions were filed challenging the adequacy of the Program EIR under CEQA and alleging that the Delta Plan is invalid. The State Water Contractors, Metropolitan, Alameda County Flood Control and Water Conservation District, Zone 7, Santa Clara Valley Water District, Antelope Valley East Kern Water Agency, and San Bernardino Valley Municipal Water District filed in Sacramento Superior Court; several environmental interest groups, as well as several fishing industry groups and the Winnemem Wintu Tribe filed in San Francisco Superior Court; and the City of Stockton filed in San Joaquin County Superior Court. On June 17, 2013, Save the California Delta Alliance, as well as the Central Delta Water Agency, South Delta Water Agency, Local Agencies of the North Delta, and others filed in San Francisco Superior Court. The impact, if any, that such litigation might have on Metropolitan’s State Water Project supplies cannot be determined at this time. In September 2013, the seven cases were coordinated in Sacramento Superior Court as the Delta Stewardship Council Cases. In March 2014, the court set a schedule for lodging of the administrative record and other pre-trial motions. All briefs were filed by May 21, 2015. No trial date has been set. In September 2013, seven cases challenging the validity of the Delta Plan and supporting environmental documents were coordinated in Sacramento Superior Court as the Delta Stewardship Council Cases. All briefs were filed by May 21, 2015. The court is expected to issue orders setting March 7-8, 2016 and May 26-27, 2016 as hearing dates. The impact, if any, that such litigation might have on Metropolitan’s State Water Project supplies cannot be determined at this time.~~

~~On July 25, 2012, Governor Jerry Brown and Secretary of the Interior Ken Salazar announced key proposed elements to advance the BDCP planning process, including north Bay Delta water diversion facilities with a total capacity of 9,000 cubic feet per second (“cfs”), two tunnels sized to minimize energy use during operations and a “decision tree” process for unresolved operation criteria such as fall and spring outflows. Preliminary cost estimates for the conveyance portion of this project alternative are approximately \$14 billion. When a decision selecting the final project has been made, costs will be updated and allocated. Metropolitan anticipates that it could bear approximately 25 percent of the costs of the conveyance portion of the project.~~

~~Public review drafts of both the BDCP and the BDCP EIR/EIS were released on December 9, 2013. However, due in part to the extensive comments received, on August 27, 2014, DWR and the other state and federal agencies leading the BDCP announced that a Recirculated Draft BDCP, EIR/EIS, and Implementing Agreement will be prepared and released in summer 2015. The final planning documents are expected to be completed in the fall of 2015. The planning, environmental documentation and preliminary engineering design for the BDCP are being prepared pursuant to the Delta Habitat Conservation and Conveyance Program Memorandum of Agreement (“MOA”) and are also scheduled to be completed in 2015. The parties to the MOA are DWR, the Bureau of Reclamation, the State and Federal Contractors Water Agency, Metropolitan, Kern County Water Agency, State Water Contractors, San Luis & Delta Mendota Water Authority, Westlands Water District and Santa Clara Valley Water District.~~

~~Water Bond. The \$7.12 billion bond~~ State of California Water Bond. On November 4, 2014, California voters approved a state-wide ballot measure, Proposition 1, ~~was approved by voters on November 4, 2014,~~ which authorized the issuance of up to \$7.12 billion of State of California, General Obligation

Bonds. Proposition 1 also enacted the Water Quality, Supply, and Infrastructure Improvement Act of ~~2014~~2014, which provides for the funding of a broad range of water projects. Metropolitan is not able to assess at this time the impact that the water bond measure or the Water Quality, Supply, and Infrastructure Improvement Act of 2014 may have on Metropolitan.

California Water Impact Network Litigation. On September 3, 2010, the California Water Impact Network and two other non-profit organizations filed a petition for writ of mandate and for declaratory and injunctive relief in Sacramento Superior Court against the SWRCB and DWR. The petition alleges that by permitting and carrying out the export of large volumes of water from the Delta through the State Water Project, the SWRCB and DWR have failed to protect public trust fishery resources in the Delta; have been diverting water from the Bay-Delta wastefully and unreasonably in violation of the prohibition against waste and unreasonable use in the California Constitution; and have failed to enforce and comply with water quality and beneficial use standards in D-1641, the 1995 SWRCB Water Quality Control Plan, and the Porter-Cologne Act. Among the relief sought in the petition is an injunction against Bay-Delta exports by the State Water Project pending compliance with the various laws and administrative orders that are alleged to have been violated. The State Water Contractors filed a motion to intervene in this action, which was granted on March 25, 2011. The court has ordered the plaintiffs to include the Bureau of Reclamation as a party. In response, the Bureau of Reclamation has asserted that federal sovereign immunity bars their inclusion in the state court action. If the court determines that the Bureau of Reclamation is an indispensable party, the lawsuit, or portions of it, may be dismissed.

~~*Monterey Agreement Litigation.* On September 15, 2000, the Third District Court of Appeal for the State of California issued its decision in *Planning and Conservation League; Citizens Planning Association of Santa Barbara County and Plumas County Flood Control District v. California Department of Water Resources and Central Coast Water Authority.* This case was an appeal of a challenge to the adequacy of the environmental documentation prepared with respect to certain amendments to the State Water Contract (the “Monterey Agreement”) which reflects the settlement of certain disputes regarding the allocation of State Water Project water. The Court of Appeal held that the environmental documentation was defective in failing to analyze the environmental effects of the Monterey Agreement’s elimination of the permanent shortage provisions of the State Water Contract. The parties negotiated a settlement agreement in the fall of 2002, which allows continued operation of the State Water Project under the Monterey Agreement principles while a new EIR was prepared. On May 4, 2010, DWR completed the final an EIR and concluded a remedial CEQA review for the Monterey Agreement, which reflects the settlement of certain disputes regarding the allocation of State Water Project water. Following DWR’s completion of the EIR, three lawsuits were filed challenging the project. Central Delta Water Agency, South Delta Water Agency, California Water Impact Network, California Sportfishing Protection Alliance, and the Center For Biological Diversity filed a lawsuit against DWR in Sacramento County Superior Court challenging the validity of the EIR under CEQA and the validity of underlying agreements under a reverse validation action (the “*Central Delta I*” case). These same plaintiffs filed a reverse validation lawsuit against the Kern County Water Agency in Kern County Superior Court (“*Central Delta II*”). This lawsuit targets a transfer of land from Kern County Water Agency to the Kern Water Bank, which was completed as part of the original Monterey Agreement. The third lawsuit is an EIR challenge brought by Rosedale-Rio Bravo Water Storage District and Buena Vista Water Storage District against DWR in Kern County Superior Court (“*Rosedale*”). The ~~two Kern County~~ Central Delta II and Rosedale cases were transferred to Sacramento Superior Court and the three cases were consolidated for trial. ~~The *Central Delta II* case was stayed pending resolution of the *Central Delta I* case.~~~~

In January 2013, the Court ruled that the validation cause of action in *Central Delta I* was time barred by the statute of limitations. ~~On March 5, 2014 the Court issued its decisions on the EIR challenges in *Central Delta I* and *Rosedale*. The Court granted the petitions for writ of mandate, holding that DWR violated CEQA because the EIR failed to adequately describe, analyze, and mitigate the potential impacts associated with the Kern Water Bank.~~ On October 2, 2014, the court issued its final rulings in *Central Delta I* and *Rosedale*, holding that DWR must complete a limited scope remedial CEQA review addressing the potential impacts of the Kern Water Bank. However, the court’s ruling also allows operation of the State

Water Project to continue under the terms of the Monterey Agreement while the remedial CEQA review is prepared and leaves in place the underlying project approvals while DWR prepares the remedial CEQA review. [The Central Delta II case was stayed pending resolution of the Central Delta I case.](#)

The plaintiffs have appealed the decision. Any adverse impact of this litigation and ruling on Metropolitan's State Water Project supplies cannot be determined at this time.

Colorado River Aqueduct

General. The Colorado River was Metropolitan's original source of water after Metropolitan's establishment in 1928. Metropolitan has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. Water from the Colorado River and its tributaries is also available to other users in California, as well as users in the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming (the "Colorado River Basin States"), resulting in both competition and the need for cooperation among these holders of Colorado River entitlements. In addition, under a 1944 treaty, Mexico has an allotment of 1.5 million acre-feet of Colorado River water annually except in the event of extraordinary drought or serious accident to the delivery system in the United States, in which event the water allotted to Mexico would be curtailed. Mexico also can schedule delivery of an additional 200,000 acre-feet of Colorado River water per year if water is available in excess of the requirements in the United States and the 1.5 million acre-feet allotted to Mexico.

The CRA, which is owned and operated by Metropolitan, transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County. ~~After deducting for conveyance losses and considering maintenance requirements, up~~ [Up](#) to 1.25 million acre-feet of water ~~aper~~ year may be conveyed through the CRA to Metropolitan's member agencies, subject to availability of Colorado River water for delivery to Metropolitan as described below.

California is apportioned the use of 4.4 million acre-feet of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California and Nevada. ~~In addition, California has historically been allowed to use Colorado River water apportioned to but not used by Arizona or Nevada when such supplies have been requested for use in California.~~ Under the 1931 priority system that has formed the basis for the distribution of Colorado River water made available to California, Metropolitan holds the fourth priority right to 550,000 acre-feet per year. This is the last priority within California's basic apportionment. In addition, Metropolitan holds the fifth priority right to 662,000 acre-feet of water, which is in excess of California's basic apportionment. See the table "PRIORITIES UNDER THE 1931 CALIFORNIA SEVEN-PARTY AGREEMENT" below. Until 2003, Metropolitan had been able to take full advantage of its fifth priority right as a result of the availability of surplus water and [water apportioned but unused water to Arizona and Nevada that was not needed by those states.](#) However, during the 1990s Arizona and Nevada increased their use of water from the Colorado River, ~~utilizing their respective basic apportionments and~~ by 2002 ~~and significantly reducing~~ [no unused apportionment was](#) available for California. In addition, a severe drought in the Colorado River Basin reduced storage in system reservoirs, ~~such that Metropolitan stopped taking~~ [ending the availability of](#) surplus deliveries ~~in 2003 in an effort to mitigate the effects of the drought to Metropolitan. As a result, California has been limited to 4.4 million acre-feet since 2003.~~ Prior to 2003, Metropolitan could divert over ~~1.25~~ [1.25](#) million acre-feet in any year, but since that time, Metropolitan's net diversions of Colorado River water have ranged from a low of nearly 633,000 acre-feet in 2006 to a high of approximately 1,176,000 acre-feet in 2014. [Projected net diversions of Colorado River are estimated to be approximately 1.2 million acre-feet in 2015.](#) Average annual net deliveries for 2004 through 2014 were approximately 883,000 acre-feet, with annual volumes dependent primarily on programs to augment supplies, including transfers of conserved water from agriculture. See "[Quantification Settlement Agreement](#)" and "[Interim Surplus Guidelines](#)" below.

PRIORITIES UNDER THE 1931 CALIFORNIA SEVEN-PARTY AGREEMENT⁽¹⁾

Priority	Description	Acre-Feet Annually
1	Palo Verde Irrigation District gross area of 104,500 acres of land in the Palo Verde Valley	
2	Yuma Project in California not exceeding a gross area of 25,000 acres in California	3,850,000
3(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys ⁽²⁾ to be served by All-American Canal	
3(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	
4	Metropolitan Water District of Southern California for use on the coastal plain	550,000
	SUBTOTAL	4,400,000
5(a)	Metropolitan Water District of Southern California for use on the coastal plain	550,000
5(b)	Metropolitan Water District of Southern California for use on the coastal plain ⁽³⁾	112,000
6(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys to be served by the All-American Canal	
6(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	300,000
	TOTAL	5,362,000
7	Agricultural use in the Colorado River Basin in California	Remaining surplus

Source: Metropolitan.

- (1) Agreement dated August 18, 1931, among Palo Verde Irrigation District, Imperial Irrigation District, Coachella Valley County Water District, Metropolitan, the City of Los Angeles, the City of San Diego and the County of San Diego. These priorities were memorialized in the agencies' respective water delivery contracts with the Secretary of the Interior.
- (2) The Coachella Valley Water District serves Coachella Valley.
[\(Footnotes continued on next page\)](#)
- (3) In 1946, the City of San Diego, the San Diego County Water Authority, Metropolitan and the Secretary of the Interior entered into a contract that merged and added the City and County of San Diego's rights to storage and delivery of Colorado River water to the rights of Metropolitan.

Metropolitan has taken steps to augment its share of Colorado River water through agreements with other agencies that have rights to use such water. Under a 1988 water conservation agreement (the "1988 Conservation Agreement") between Metropolitan and the Imperial Irrigation District ("IID"), Metropolitan provided funding for IID to construct and operate a number of conservation projects that have conserved up to 109,460 acre-feet of water per year that has been provided to Metropolitan. In 2015, 107,820 acre-feet of conserved water is being made available by IID to Metropolitan. Under the October 2003 Quantification Settlement Agreement and related agreements, Metropolitan, at the request of Coachella Valley Water District ("CVWD"), forgoes up to 20,000 acre-feet of this water each year for diversion by CVWD. See "[Quantification Settlement Agreement](#)" below. In 2013 and 2014, CVWD's requests were for 6,693 and an

estimated 19,795 acre-feet respectively, leaving 98,307 acre-feet in 2013 and an estimated 84,305 acre-feet for Metropolitan. ~~In 1992, Metropolitan entered into an agreement with the Central Arizona Water Conservation District (“CAWCD”) to demonstrate the feasibility of CAWCD storing Colorado River water in central Arizona for the benefit of an entity outside of the State of Arizona. Pursuant to this agreement, CAWCD created 80,909 acre-feet of long term storage credits that, under the agreement as amended, were recovered and delivered to Metropolitan between 2007 and 2010.~~

Metropolitan and the Palo Verde Irrigation District (“PVID”) signed the program agreement for a Land Management, Crop Rotation and Water Supply Program in August 2004. This program provides up to 133,000 acre-feet of water to be available to Metropolitan in certain years. The term of the program is 35 years. Fallowing began on January 1, 2005. In March 2009, Metropolitan and PVID entered into a supplemental fallowing program within PVID that provided for the fallowing of additional acreage in 2009 and 2010. In calendar years 2009 and 2010, respectively, 24,100 acre-feet and 32,300 acre-feet of water were saved and made available to Metropolitan under the supplemental program. The following table shows annual volumes of water saved and made available to Metropolitan:

WATER AVAILABLE FROM PVID LAND MANAGEMENT, CROP ROTATION AND WATER SUPPLY PROGRAM

<u>Calendar Year</u>	<u>Volume (acre-feet)</u>
2005	108,700
2006	105,000
2007	72,300
2008	94,300
2009*	144,300
2010*	148,600
2011	122,200
2012	73,700
2013	32,750
2014	43,010

Source: Metropolitan.

* Includes water from the supplemental fallowing program that provided for fallowing of additional acreage in 2009 and 2010.

In May 2008, Metropolitan provided \$28.7 million to join the [Central Arizona Water Conservation District \(“CAWCD”\)](#) and the Southern Nevada Water Authority (“SNWA”) in funding the Bureau of Reclamation’s construction of an 8,000 acre-foot off-stream regulating reservoir near Drop 2 of the All-American Canal in Imperial County (officially ~~renamed~~[named](#) the Warren H. Brock Reservoir). Construction was completed in October 2010 and the Bureau of Reclamation refunded \$2.64 million in unused contingency funds to Metropolitan. The Warren H. Brock Reservoir conserves about 70,000 acre-feet of water per year by capturing and storing [water that would otherwise non-storable water flow. be lost from the system.](#) In return for its funding, Metropolitan received 100,000 acre-feet of water that was stored in Lake Mead, ~~and has the ability to deliver up to 25,000 acre-feet of water in any single year for its future use.~~ Besides the additional water supply, the new reservoir adds to the flexibility of Colorado River operations. As of ~~January~~[September](#) 1, 2015, Metropolitan had received 35,000 acre-feet of this water, and had 65,000 acre-feet remaining.

In September 2009, Metropolitan authorized participation with SNWA, the Colorado River Commission of Nevada, the CAWCD and the Bureau of Reclamation in the pilot operation of the Yuma Desalting Plant. The Bureau of Reclamation concluded the pilot operation of the Yuma Desalting Plant in March 2011. Metropolitan’s contribution for the funding agreement was \$8,395,313, of which \$1,087,687

was refunded to Metropolitan. Metropolitan's yield from the pilot run of the project was 24,397 acre-feet. That water is stored in Lake Mead for Metropolitan's future use.

In November 2012, Metropolitan executed agreements in support of a program to augment Metropolitan's Colorado River supply from 2013 through 2017 through an international pilot project in Mexico. Metropolitan's total share of costs will be \$5 million for 47,500 acre-feet of project supplies. The costs will be paid between 2015 and 2017, and the conserved water will be credited to Metropolitan's intentionally-created surplus water account no later than 2017. See "*Intentionally-Created Surplus Program*" below. In December 2013, Metropolitan and IID executed an agreement under which IID will pay half of Metropolitan's program costs, or \$2.5 million, in return for half of the project supplies, or 23,750 acre-feet.

Quantification Settlement Agreement. The Quantification Settlement Agreement ("QSA"), executed by CVWD, IID and Metropolitan in October 2003, establishes Colorado River water use limits for IID and CVWD, and provides for specific acquisitions of conserved water and water supply arrangements for up to 75 years, and restored the opportunity for Metropolitan to receive any "special surplus water" under the Interim Surplus Guidelines. See "Interim Surplus Guidelines" below. The QSA also allows, The QSA and related agreements provide a framework for Metropolitan to enter into other cooperative Colorado River supply programs. ~~Related agreements modify existing conservation and cooperative water supply agreements consistent with the QSA,~~ and set aside several disputes among California's Colorado River water agencies.

Specific programs under the QSA and related agreements include lining portions of the All-American and Coachella Canals, which conserve approximately 96,000 acre-feet annually. As a result, about 80,000 acre-feet of conserved water is delivered to the San Diego County Water Authority ("SDCWA") by exchange with Metropolitan. Metropolitan also takes delivery of 16,000 acre-feet annually that will be made available for the benefit of the La Jolla, Pala, Pauma, Rincon and San Pasqual Bands of Mission Indians, the San Luis Rey River Indian Water Authority, the City of Escondido and the Vista Irrigation District, upon completion of a water rights settlement. ~~An amendment to the 1988 Conservation Agreement between Metropolitan and IID and an associated 1989 Approval Agreement among Metropolitan, IID, CVWD and PVID, extended the term of the 1988 Conservation Agreement and limited the single year amount of water used by CVWD to 20,000 acre-feet.~~ Also included under the QSA is the Delivery and Exchange Agreement between Metropolitan and CVWD that provides for Metropolitan, when requested, to deliver annually up to 35,000 acre-feet of Metropolitan's State Water Project contractual water to CVWD by exchange with Metropolitan's available Colorado River supplies. ~~In calendar year 2011, under a supplemental agreement with CVWD, Metropolitan delivered 105,000 acre-feet, which consisted of the full 35,000 acre-feet for 2011 plus advance delivery of the full contractual amounts for 2012 and 2013. In 2013, Metropolitan entered into a second supplemental agreement with CVWD. Under this agreement, Metropolitan delivered to CVWD 2,508 acre-feet of water in 2013 that would otherwise have been available in 2014. In return, CVWD reduced its 2012 Colorado River water order by 9,537 acre-feet and allowed Metropolitan to use that water conserved by IID.~~ In 2021, the transfer of water conserved annually by IID to SDCWA is expected to reach 205,000 acre-feet. See description below under the caption "*Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*"; see also "METROPOLITAN REVENUES—Principal Customers" in this Appendix A. With full implementation of the programs identified in the QSA, at times when California is limited to its basic apportionment of 4.4 million acre-feet per year, Metropolitan expects to be able to annually divert to its service area approximately 850,000 acre-feet of Colorado River water plus water from other water augmentation programs it develops, including the PVID program, which provides up to approximately 130,000 acre-feet of water per year. (Amounts of Colorado River water received by Metropolitan in 2004 through 2014 are discussed under the heading "*Colorado River Aqueduct—General*" above.)

A complicating factor in completing the QSA was the fate of the Salton Sea, an important habitat for a wide variety of fish-eating birds as a stopover spot along the Pacific flyway. Some of these birds are listed as threatened or endangered species under the California and Federal ESAs. Located at the lowest elevations

of an inland basin and fed primarily by agricultural drainage with no outflows other than evaporation, the Salton Sea is trending towards hyper-salinity, which has already impacted the Salton Sea's fishery. Without mitigation, the transfer of water from IID to SDCWA, one of the core programs implemented under the QSA, would reduce the volume of agricultural drainage from IID's service area into the Salton Sea, which in turn would accelerate this natural trend of the Salton Sea to hyper-salinity. See "*—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*" below. In passing legislation to implement the QSA, the Legislature committed the State to undertake restoration of the Salton Sea ecosystem. Restoration of the Salton Sea is subject to selection and approval of an alternative by the Legislature and funding of the associated capital improvements and operating costs. The Secretary for the California Natural Resources Agency submitted an \$8.9 billion preferred alternative for restoration of the Salton Sea to the Legislature in May 2007. While withholding authorization of the preferred alternative, the Legislature has appropriated funds from Proposition 84 to undertake demonstration projects and investigations called for in the Secretary's recommendation. On September 25, 2010, then-Governor Schwarzenegger signed Senate Bill 51, establishing the "Salton Sea Restoration Council" as a state agency in the Natural Resources Agency to oversee restoration of the Salton Sea. The council was directed to evaluate alternative Salton Sea restoration plans and to report to the Governor and the Legislature by June 30, 2013 with a recommended plan. However, Governor Brown's 2012 Reorganization Plan, as modified by budget trailer bill SB 1018 (Leno), Chapter 39, Statutes of 2012, effective December 31, 2012, eliminated the council before it ever met. The QSA implementing legislation also established the Salton Sea Restoration Fund, to be funded in part by payments made by the parties to the QSA and fees on certain water transfers among the parties to the QSA. Under the QSA agreements Metropolitan agreed to pay \$20 per acre-foot ([in 2003 dollars](#)) into the Salton Sea Restoration Fund for any special surplus Colorado River water that Metropolitan ~~elects to take~~[receives](#) under the Interim Surplus Guidelines, if available. Metropolitan also agreed to acquire up to 1.6 million acre-feet of water conserved by IID, excluding water transferred from IID to SDCWA (see "*—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*" below), if such water can be transferred consistent with plans for Salton Sea restoration, at an acquisition price of \$250 per acre-foot (in 2003 dollars), with net proceeds to be deposited into the Salton Sea Restoration Fund. No conserved water has been made available to Metropolitan under this program. As part of an effort to mitigate the effects of the drought in the Colorado River Basin that began in 2000, Metropolitan elected not to take delivery of special surplus Colorado River water that was available from October 2003 through 2004 and from 2006 through 2007. No special surplus water has been available since 2007. Metropolitan may receive credit for the special surplus water payments against future contributions for the Lower Colorado River Multi-Species Conservation Program (see "*—Environmental Considerations*" below). In consideration of these agreements, Metropolitan will not have or incur any liability for restoration of the Salton Sea.

Sale of Water by the Imperial Irrigation District to San Diego County Water Authority. On April 29, 1998, SDCWA and IID executed an agreement (the "Transfer Agreement") for SDCWA's purchase from IID of Colorado River water that is conserved within IID. An amended Transfer Agreement, executed as one of the QSA agreements, set the maximum transfer amount at 205,000 acre-feet in 2021, with the transfer gradually ramping up to that amount over an approximately twenty-year period, [then](#) stabilizing at 200,000 acre-feet per year beginning in 2023.

No facilities exist to deliver water directly from IID to SDCWA. Accordingly, Metropolitan and SDCWA entered into an exchange contract, pursuant to which SDCWA makes available to Metropolitan at its intake at Lake Havasu on the Colorado River the conserved Colorado River water acquired by SDCWA from IID and water allocated to SDCWA that has been conserved as a result of the lining of the All-American and Coachella Canals. See "*—Quantification Settlement Agreement*" above. Metropolitan delivers an equal volume of water from its own sources of supply through portions of its delivery system to SDCWA. The deliveries to both Metropolitan and SDCWA are deemed to be made in equal monthly increments. In consideration for the conserved water made available to Metropolitan by SDCWA, a lower rate is paid by SDCWA for the exchange water delivered by Metropolitan. The price payable by SDCWA is calculated using the charges set by Metropolitan's Board from time to time to be paid by its member agencies for the conveyance of water through Metropolitan's facilities. See "METROPOLITAN

REVENUES–Wheeling and Exchange Charges” and “–Litigation Challenging Rate Structure” in this Appendix A for a description of Metropolitan’s charges for the conveyance of water through Metropolitan’s facilities and litigation in which SDCWA and IID are challenging such charges. ~~In 2011, 143,243 acre feet were delivered by SDCWA for exchange, consisting of 63,278 acre feet of IID conservation plus 79,965 acre feet of conserved water from the Coachella Canal and All American Canal lining projects. In 2012, 186,861 acre feet were delivered by SDCWA for exchange, consisting of 106,722 acre feet of IID conservation plus 80,139 acre feet of conserved water from the Coachella Canal and All American Canal lining projects. In 2013, 180,256 acre feet were delivered by SDCWA for exchange, consisting of 100,000 acre feet of IID conservation plus 80,256 acre feet of conserved water from the Coachella Canal and All American Canal lining projects. In 2014, 180,123 acre-feet were delivered by SDCWA for exchange, consisting of 100,000 acre-feet of IID conservation plus 80,123 acre-feet of conserved water from the Coachella Canal and All-American Canal lining projects.~~

QSA Related Litigation. On November 5, 2003, IID filed a validation action in Imperial County Superior Court, seeking a judicial determination that thirteen agreements associated with the IID/SDCWA water transfer and the QSA are valid, legal and binding. Other lawsuits also were filed contemporaneously challenging the execution, approval and implementation of the QSA on various grounds. All of the QSA cases were coordinated in Sacramento Superior Court. Between early 2004 and late 2009, a number of pre-trial challenges and dispositive motions were filed by the parties and ruled on by the court, which reduced the number of active cases and narrowed the issues for trial, the first phase of which began on November 9, 2009 and concluded on December 2, 2009. One of the key issues in this first phase was the constitutionality of the QSA Joint Powers Agreement, pursuant to which IID, CVWD and SDCWA agreed to commit \$163 million toward certain mitigation and restoration costs associated with implementation of the QSA and related agreements, and the State agreed to be responsible for any costs exceeding this amount. A final judgment was issued on February 11, 2010, in which the trial court held that the State’s commitment was unconditional in nature and, as such, violated the appropriation requirement and debt limitation under the California Constitution. The trial court also invalidated eleven other agreements, including the QSA, because they were inextricably interrelated with the QSA Joint Powers Agreement. Lastly, the trial court ruled that all other claims raised by the parties, including CEQA claims related to the QSA Programmatic EIR and the IID Transfer Project EIR, are moot.

In March 2010, Metropolitan, IID, CVWD, SDCWA, the State and others filed notices of appeal challenging various aspects of the trial court’s ruling. On December 7, 2011, the court of appeal issued its ruling reversing, in part, the trial court’s ruling. In particular, the court of appeal held that while the State’s commitment to fund mitigation costs in excess of \$163 million was unconditional, actual payment of such costs was subject to a valid appropriation by the Legislature, as required under the California Constitution. Moreover, the State’s commitment did not create a present debt in excess of the State Constitution’s \$300,000 debt limit. Thus, the QSA Joint Powers Agreement was held to be constitutional. The court of appeal also rejected other challenges to this agreement, including that it was beyond the State’s authority, there was no “meeting of the minds,” and there was a conflict of interest. In light of its ruling, the court of appeal remanded the matter back to the trial court for further proceedings on the claims that had been previously dismissed as moot. A two-day bench trial was held on November 13, 2012. On June 4, 2013 the trial court issued its ruling, holding that IID had acted within its authority in executing these agreements and had complied with all substantive and procedural requirements imposed under State law. In addition, the court held that the environmental reviews conducted in support of the QSA and related agreements complied with CEQA and its implementing regulations in all respects. In short, the trial court rejected all of the claims asserted by opponents of the QSA. Parties challenging the QSA appealed and agencies supporting the QSA filed a cross-appeal.

Briefing by the parties to the appeals and cross-appeals was completed in August 2014. ~~The court of appeal subsequently accepted a settlement agreement and issued an order dismissing three parties from further proceedings. As a result, the only remaining QSA opponents involved in the state appellate proceeding are the County of Imperial and the Imperial County Air Pollution Control District. No date for~~

~~oral argument has been set. The impact that this litigation might have on Metropolitan's water supplies cannot be adequately determined at this time.~~ However, in late 2014 and early 2015, IID entered into settlement agreements with all of the appellants, resulting in dismissal of their appeals. The cross-appeals were then dismissed as moot, bringing to an end all litigation challenging the QSA and its related agreements.

Navajo Nation Litigation. The Navajo Nation filed litigation against the Department of the Interior, specifically the Bureau of Reclamation and the Bureau of Indian Affairs, in 2003, alleging that the Bureau of Reclamation has failed to determine the extent and quantity of the water rights of the Navajo Nation in the Colorado River and that the Bureau of Indian Affairs has failed to otherwise protect the interests of the Navajo Nation. The complaint challenges the adequacy of the environmental review for the Interim Surplus Guidelines (as defined under “—Interim Surplus Guidelines” below) and seeks to prohibit the Department of the Interior from allocating any “surplus” water until such time as a determination of the rights of the Navajo Nation is completed. Metropolitan and other California water agencies filed motions to intervene in this action. In October 2004 the court granted the motions to intervene and stayed the litigation to allow negotiations among the Navajo Nation, federal defendants, CAWCD, State of Arizona and Arizona Department of Water Resources. After years of negotiations, a tentative settlement was proposed in 2012 that would provide the Navajo Nation with specified rights to water from the Little Colorado River and groundwater basins under the reservation, along with federal funding for development of water supply systems on the tribe's reservation. The proposed agreement was rejected by tribal councils for both the Navajo and the Hopi, who are now seeking to intervene. On May 16, 2013, the stay of proceedings was lifted. On June 3, 2013, the Navajo Nation moved for leave to file a first amended complaint, which the court granted on June 27, 2013. The amended complaint added a legal challenge to the Lower Basin Shortage Guidelines adopted by the Secretary of the Interior in 2007 that allow Metropolitan and other Colorado River water users to store water in Lake Mead. Metropolitan has used these new guidelines to store over 500,000 acre-feet of water in Lake Mead that may be delivered at Metropolitan's request in future years. See “—*Intentionally-Created Surplus Program*” below. On July 22, 2014, the district court dismissed the lawsuit in its entirety, ruling that the Navajo Nation lacked standing and that the claim was barred against the federal defendants. The district court denied a motion by the Navajo Nation for leave to amend the complaint further after the dismissal. ~~The Navajo Nation filed notice of intent to appeal the decision on~~ On September 19, 2014, ~~from~~ 2014, ~~the Navajo Nation appealed~~ the dismissal of its claims related to the Interim Surplus Guidelines, the Lower Basin Shortage Guidelines, and breach of the federal trust obligation to the tribe. ~~Briefing by the parties was completed by May 20, 2015. No date for oral argument has been set.~~ Metropolitan is unable to assess at this time the likelihood of success of this appeal or any future claims, or their potential effect on Colorado River water supplies.

Interim Surplus Guidelines. In January 2001, the Secretary of the Interior adopted guidelines (the “Interim Surplus Guidelines”) for use through 2016 in determining if there is surplus Colorado River water available for use in California, Arizona and Nevada. The purpose of the Interim Surplus Guidelines is to provide a greater degree of predictability with respect to the availability and quantity of surplus water through 2016. The Interim Surplus Guidelines were amended in 2007 and now extend through 2026 (see “—*Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead*” below). ~~The Interim Surplus Guidelines contain a series of benchmarks for reductions in agricultural use of Colorado River water within California by set dates.~~

Under the Interim Surplus Guidelines, Metropolitan initially expected to divert up to 1.25 million acre-feet of Colorado River water annually under foreseeable runoff and reservoir storage scenarios from 2004 through 2016. However, an extended drought in the Colorado River Basin reduced these initial expectations. On May 16, 2002 SNWA and Metropolitan entered into an Agreement Relating to Implementation of Interim Colorado River Surplus Guidelines, in which SNWA and Metropolitan agreed to the allocation of unused apportionment as provided in the Interim Surplus Guidelines and on the priority of SNWA for interstate banking of water in Arizona. SNWA and Metropolitan entered into a storage and interstate release agreement on October 21, 2004. Under this program, SNWA can request that Metropolitan store unused Nevada apportionment in California. The amount of water stored through 2014 under this

agreement is approximately 205,000 acre-feet. In subsequent years, SNWA may request recovery of this stored water. As part of a 2012 executed amendment, it is expected that SNWA will not request return of ~~this water before 2022. The stored water provides flexibility to Metropolitan for blending Colorado River water with State Water Project water and improves near term water supply reliability. the water stored with Metropolitan before 2022. In September 2015, the boards of SNWA and Metropolitan authorized an amendment under which MWD will pay SNWA approximately \$44 million and SNWA will store an additional 150,000 acre-feet with Metropolitan during 2015. 125,000 acre-feet will be added to SNWA's storage account with Metropolitan, increasing the total amount of water stored to 330,000 acre-feet. When SNWA requests the return of any of the stored 125,000 acre-feet, SNWA will reimburse Metropolitan for an equivalent proportion of the \$44 million based on the amount of water returned plus inflation. The stored water will allow Metropolitan to have a full water supply from the Colorado River in 2015.~~

Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead. In November 2007, the Bureau of Reclamation issued a Final Environmental Impact Statement (“EIS”) regarding new federal guidelines concerning the operation of the Colorado River system reservoirs. These new guidelines provide water release criteria from Lake Powell and water storage and water release criteria from Lake Mead during shortage and surplus conditions in the Lower Basin, provide a mechanism for the storage and delivery of conserved system and non-system water in Lake Mead and extend the Interim Surplus Guidelines through 2026. The Secretary of the Interior issued the final guidelines through a Record of Decision signed in December 2007. The Record of Decision and accompanying agreement among the Colorado River Basin States protect reservoir levels by reducing deliveries during drought periods, encourage agencies to develop conservation programs and allow the Colorado River Basin States to develop and store new water supplies. The Colorado River Basin Project Act of 1968 insulates California from shortages in all but the most extreme hydrologic conditions.

Intentionally-Created Surplus Program. Metropolitan ~~and the Bureau of Reclamation executed an agreement on May 26, 2006 for a demonstration program that allowed Metropolitan to leave conserved water in Lake Mead that Metropolitan would otherwise have used in 2006 and 2007. may store intentionally-created surplus water in Lake Mead under the federal guidelines for operation of the Colorado River system reservoirs described above under the heading “Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead.”~~ Only “intentionally-created surplus” water (water that has been conserved through an extraordinary conservation measure, such as land fallowing) was eligible for storage in Lake Mead under this program. See the table “Metropolitan’s Water Storage Capacity and Water in Storage” under the heading “—Storage Capacity and Water in Storage” below. ~~Metropolitan may store additional intentionally-created surplus water in Lake Mead under the federal guidelines for operation of the Colorado River system reservoirs described above under the heading “Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead.”~~ The Secretary of the Interior will deliver/delivers intentionally-created surplus water to Metropolitan in accordance with the terms of a December 13, 2007 Delivery Agreement between the United States and Metropolitan. As of January 2015, Metropolitan had approximately 151,000 acre-feet in its intentionally-created surplus accounts. These surplus accounts are made up of water conserved by fallowing in the Palo Verde Valley, projects implemented with IID in its service area, groundwater desalination, the Warren H. Brock Reservoir Project and the Yuma Desalting Plant pilot run.

~~Metropolitan’s access to its intentionally created surplus reserves currently stored in Lake Mead could be limited in calendar years 2015 and 2016 because of projected low storage levels in Lake Mead. If the Bureau of Reclamation’s August 2015 projection of Lake Mead’s elevation on January 1, 2016 is at or below 1,075 feet, the Secretary of the Interior, at their discretion, could withhold delivery of a portion or all of Metropolitan’s intentionally created surplus reserves in Lake Mead in calendar year 2015. If the Bureau of Reclamation’s August 2016 projection of Lake Mead’s elevation on January 1, 2017 is at or below 1,075 feet, the Secretary of the Interior could withhold delivery of a portion or all of Metropolitan’s intentionally created surplus reserves in Lake Mead in calendar year 2016. In its May 2015 study, the Bureau of~~

~~Reclamation projects that Lake Mead elevation would be above 1,075 feet on January 1, 2016, but below 1,075 feet on January 1, 2017.~~

Environmental Considerations. Federal and state environmental laws protecting fish species and other wildlife species have the potential to affect Colorado River operations. A number of species that are on either “endangered” or “threatened” lists under the ESAs are present in the area of the Lower Colorado River, including among others, the bonytail chub, razorback sucker, southwestern willow flycatcher and Yuma clapper rail. To address this issue, a broad-based state/federal/tribal/private regional partnership that includes water, hydroelectric power and wildlife management agencies in Arizona, California and Nevada have developed a multi-species conservation program for the main stem of the Lower Colorado River (the Lower Colorado River Multi-Species Conservation Program or “MSCP”). The MSCP allows Metropolitan to obtain federal and state permits for any incidental take of protected species resulting from current and future water and power operations of its Colorado River facilities and to minimize any uncertainty from additional listings of endangered species. The MSCP also covers operations of federal dams and power plants on the river that deliver water and hydroelectric power for use by Metropolitan and other agencies. The MSCP covers 27 species and habitat in the Lower Colorado River from Lake Mead to the Mexican border for a term of 50 years. Over the 50 year term of the program, the total cost to Metropolitan will be about \$88.5 million (in 2003 dollars), and annual costs will range between \$0.8 million and \$4.7 million (in 2003 dollars).

Quagga Mussel Control Program. In January 2007 quagga mussels were discovered in Lake Mead. Quagga mussels can reproduce quickly and, if left unmanaged, can clog intakes and raw water conveyance systems, alter or destroy fish habitats and affect lakes and beaches. Quagga mussels were introduced in the Great Lakes in the late 1980s. These organisms infest much of the Great Lakes basin, the St. Lawrence Seaway, and much of the Mississippi River drainage system. The most likely source of the quagga mussel infestation in the Colorado River is recreational boats with exposure to water bodies around the Great Lakes. Metropolitan developed a program in 2007 to address the long term introduction of mussel larvae into the CRA from the Lower Colorado River, which is now heavily colonized from Lake Mead through Lake Havasu. The quagga mussel control program consists of surveillance activities and control measures. Surveillance activities are conducted annually in conjunction with regularly scheduled two- to three-week long CRA shutdowns, which have the added benefit of desiccating exposed quagga mussels. Control activities consist of continuous chlorination at Copper Basin, quarterly use of a mobile chlorinator at outlet towers and physical removal of mussels from the trash racks in Lake Havasu. Recent shutdown inspections have demonstrated that the combined use of chlorine and regularly scheduled shutdowns effectively control mussel infestation in the CRA. Metropolitan’s costs for controlling quagga mussels are between \$4 million and \$5 million per year.

Water Transfer, Storage and Exchange Programs

General. California’s agricultural activities consume approximately 34 million acre-feet of water annually, which is approximately 80 percent of the total water used for agricultural and urban uses and 40 percent of the water used for all consumptive uses, including environmental demands. Voluntary water transfers and exchanges can make a portion of this agricultural water supply available to support the State’s urban areas. Such existing and potential water transfers and exchanges are an important element for improving the water supply reliability within Metropolitan’s service area and accomplishing the reliability goal set by Metropolitan’s Board. Metropolitan is currently pursuing voluntary water transfer and exchange programs with State, federal, public and private water districts and individuals. The following are summary descriptions of some of these programs.

Arvin-Edison/Metropolitan Water Management Program. In December 1997, Metropolitan entered into an agreement with the Arvin-Edison Water Storage District (“Arvin-Edison”), an irrigation agency located southeast of Bakersfield, California. Under the program, Arvin-Edison stores water on behalf of Metropolitan. In January 2008, Metropolitan and Arvin-Edison amended the agreement to enhance the

program's capabilities and to increase the delivery of water to the California Aqueduct. Up to 350,000 acre-feet of Metropolitan's water may be stored and Arvin-Edison is obligated to return up to 75,000 acre-feet of stored water in any year to Metropolitan, upon request. The agreement will terminate in 2035 unless extended. To facilitate the program, new wells, spreading basins and a return conveyance facility connecting Arvin-Edison's existing facilities to the California Aqueduct have been constructed. The agreement also provides Metropolitan priority use of Arvin-Edison's facilities to convey high quality water available on the east side of the San Joaquin Valley to the California Aqueduct. Metropolitan's current storage account under the Arvin-Edison/Metropolitan Water Management Program is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading "—Storage Capacity and Water in Storage" below.

Semitropic/Metropolitan Groundwater Storage and Exchange Program. In 1994 Metropolitan entered into an agreement with the Semitropic Water Storage District ("Semitropic"), located adjacent to the California Aqueduct north of Bakersfield, to store water in the groundwater basin underlying land within Semitropic. The minimum annual yield available to Metropolitan from the program is ~~31,500~~44,700 acre-feet of water and the maximum annual yield is ~~223,000~~236,200 acre-feet of water depending on the available unused capacity and the State Water Project allocation. ~~In December 2014, Metropolitan entered into an amendment that expands the annual yield by an additional 13,200 acre-feet per year.~~ Metropolitan's current storage account under the Semitropic program is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading "—Storage Capacity and Water in Storage" below.

California Aqueduct Dry-Year Transfer Program. ~~Metropolitan has entered into~~Through agreements with the Kern Delta Water District, the Mojave Water Agency (~~"Demonstration Water Exchange Program"~~) and the San Bernardino Valley Municipal Water District ("SBVMWD") ~~to insure~~ the California Aqueduct Dry-Year Transfer Program insures against regulatory and operational uncertainties in the State Water Project system that could impact the reliability of existing supplies. The total potential yield from the three agreements is approximately 80,000 acre-feet of water per year when sufficient water is available.

Metropolitan entered into an agreement with SBVMWD in April 2001 to coordinate the use of facilities and State Water Project water supplies. The agreement allows Metropolitan a minimum purchase of 20,000 acre-feet on an annual basis with the option to purchase additional water when available. ~~Also, the~~The program includes 50,000 acre-feet of storage capacity for the carryover ~~storage~~of water purchased from SBVMWD. In addition to water being supplied using the State Water Project, the previously stored water can be returned using an interconnection between the San Bernardino Central Feeder and Metropolitan's Inland Feeder. On October 14, 2014, the Board approved the extension of this agreement to December 31, 2035 and ~~an~~a one-time exchange of up to 11,000 acre-feet.

Metropolitan entered into an agreement with Kern Delta Water District on May 27, 2003, for a groundwater banking and exchange transfer program to allow Metropolitan to store up to 250,000 acre-feet of State Water Contract water in wet years and permit Metropolitan, at Metropolitan's option, a return of up to 50,000 acre-feet of water annually during hydrologic and regulatory droughts.

Additionally, Metropolitan entered into a groundwater banking and exchange transfer agreement with Mojave Water Agency on October 29, 2003. This agreement was amended in 2011 to allow for the cumulative storage of up to 390,000 acre-feet. The agreement allows for Metropolitan to store water in an exchange account for later return. Through 2021, and when the State Water Project allocation is 60 percent or less, Metropolitan can annually withdraw the Mojave Water Agency's State Water Project contractual amounts in excess of a 10 percent reserve. When the State Water Project allocation is over 60 percent, the reserved amount for Mojave's local needs increases to 20 percent. Under a 100 percent allocation, the State Water Contract provides Mojave Water Agency 82,800 acre-feet of water. Metropolitan's current storage account under these programs is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading "—Storage Capacity and Water in Storage" below.

Other Water Purchase, Storage and Exchange Programs in the San Joaquin and Sacramento Valleys. Metropolitan has been negotiating, and will continue to pursue, water purchase, storage and exchange programs with other agencies in the Sacramento and San Joaquin Valleys. These programs involve the storage of both State Water Project supplies and water purchased from other sources to enhance Metropolitan’s dry-year supplies and the exchange of normal year supplies to enhance Metropolitan’s water reliability and water quality, in view of dry conditions and potential impacts from the ESA cases discussed above under the heading “—State Water Project—*Endangered Species Act Considerations.*” In addition, in the fall of 2008 DWR convened the State Drought Water Bank (the “Drought Water Bank”) as a one-year program to help mitigate water shortages in 2009. During 2009, Metropolitan purchased 36,900 acre-feet of Central Valley Water supplies through the Drought Water Bank, resulting in approximately 29,000 acre-feet of water deliveries after accounting for carriage and conveyance losses. In calendar year 2010, Metropolitan participated with other State Water Contractors as a group to purchase 88,137 acre-feet of water, resulting in approximately 68,000 acre-feet of deliveries to Metropolitan after carriage and conveyance losses. Additionally during 2010, Metropolitan entered into two transactions with the Westlands Water District and the San Luis Water District, neither of which is subject to carriage losses. Under the first transaction, Metropolitan purchased 18,453 acre-feet of water. In the second, Metropolitan accepted delivery of 110,692 acre-feet of water stored in the San Luis Reservoir, a joint use facility of the State Water Project and federal Central Valley Project, and returned two-thirds of that amount from Metropolitan’s State Water Project supply in 2011 for a net yield of approximately 37,000 acre-feet. In 2015, Metropolitan participated with other State Water Contractors to purchase up to 21,020 acre-feet. Metropolitan’s projected share of these supplies is up to 13,166 acre-feet, which would be subject to carriage losses resulting in deliveries of up to 10,333 acre-feet to Metropolitan.

Metropolitan entered into an agreement with DWR in December 2007 to purchase a portion of the water released by the Yuba County Water Agency (“YCWA”). YCWA was involved in a SWRCB proceeding in which it was required to increase Yuba River fishery flows. Within the framework of agreements known as the Yuba River Accord, DWR entered into an agreement for the long-term purchase of water from YCWA. Metropolitan, other State Water Project Contractors, and the San Luis Delta Mendota Water Authority entered into separate agreements with DWR for the purchase of portions of water made available. Metropolitan’s agreement allows Metropolitan to purchase, in dry years through 2025, available water supplies, which have ranged from approximately 10,000 acre-feet to 67,068 acre-feet per year. The agreement permits YCWA to transfer additional supplies at its discretion. For calendar years 2008, 2009 and 2010, Metropolitan purchased 26,430 acre-feet, 42,915 acre-feet and 67,068 acre-feet of water, respectively, from YCWA under this program. No purchases were made in calendar years 2011 and 2012, due to favorable water supply conditions. In calendar years 2013 and 2014, Metropolitan purchased 10,209 acre-feet and approximately 11,000 acre-feet, respectively. Metropolitan’s projected share of YCWA transfer supplies in 2015 is 8,192 acre-feet, which would be subject to carriage losses resulting in deliveries of up to 6,554 acre-feet to Metropolitan.

In 2013, in response to dry conditions, DWR established a new Multi-Year Water Pool Demonstration Program to allow two-year sales of State Water Project supplies between State Water Project Contractors. In 2013 and 2014, Metropolitan purchased 30,000 acre-feet and zero acre-feet of these supplies, respectively. DWR is administering a Multi-Year Water Pool during 2015 and 2016 because of continuing dry conditions. In 2015 Metropolitan purchased 1,374 acre-feet, which is not subject to carriage losses. The amount of water available for purchase in 2016 is not yet known.

Metropolitan/CVWD/Desert Water Agency Exchange and Advance Delivery Agreement. Metropolitan has agreements with the CVWD and the Desert Water Agency (“DWA”) ~~that require~~ in which Metropolitan to exchange exchanges its Colorado River water for those agencies’ State Water Project contractual water on an annual basis. Because DWA and CVWD do not have a physical connection to the State Water Project, Metropolitan takes delivery of DWA’s and CVWD’s State Water Project supplies and delivers a like amount of Colorado River water to the agencies. In accordance with an advance delivery agreement executed by Metropolitan, CVWD and DWA, Metropolitan has delivered Colorado River water in

advance to these agencies for storage in the Upper Coachella Valley groundwater basin. In years when it is necessary to augment available supplies to meet local demands, Metropolitan has the option to meet the exchange delivery obligation through drawdowns of the advance delivery account, rather than deliver its Colorado River supply. Metropolitan's current storage account under the CVWD/DWA program is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading "—Storage Capacity and Water in Storage" below. In addition to the CVWD/DWA exchange agreements, Metropolitan has entered into separate agreements with CVWD and DWA for delivery of non-State Water Project supplies acquired by CVWD or DWA. Similarly, Metropolitan takes delivery of these supplies from State Water Project facilities and incurs an exchange obligation to CVWD or DWA. From 2008 through 2014, Metropolitan has received a net additional supply of 61,965 acre-feet of water acquired by CVWD and DWA.

Other Agreements. Metropolitan is entitled to storage and access to stored water in connection with various storage programs and facilities. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct" and "REGIONAL WATER RESOURCES—Local Water Supplies—*Conjunctive Use*" in this Appendix A, as well as the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading "—Storage Capacity and Water in Storage" below.

Storage Capacity and Water in Storage

Metropolitan's storage capacity, which includes reservoirs, conjunctive use and other groundwater storage programs within Metropolitan's service area and groundwater and surface storage accounts delivered through the State Water Project or CRA, is approximately ~~5.93~~5.83 million acre-feet. In 2014, approximately 626,000 acre-feet of stored water was emergency storage that was reserved for use in the event of supply interruptions from earthquakes or similar emergencies (see "METROPOLITAN'S WATER DELIVERY SYSTEM—Seismic Considerations" in this Appendix A), as well as extended drought. Metropolitan's emergency storage requirement is established periodically to provide a six-month water supply at 75 percent of member agencies retail demand under normal hydrologic conditions. Metropolitan's ability to replenish water storage, both in the local groundwater basins and in surface storage and banking programs, has been limited by Bay-Delta pumping restrictions under ~~the Interim Remedial Order in *NRDC v. Kempthorne* and~~ the biological opinions issued for listed species. See "—State Water Project—*Endangered Species Act Considerations*" above. Metropolitan replenishes its storage accounts when imported supplies exceed demands. Effective storage management is dependent on having sufficient years of excess supplies to store water so that it can be used during times of shortage. Historically, excess supplies have been available in about seven of every ten years. Metropolitan forecasts that, with anticipated supply reductions from the State Water Project due to pumping restrictions, it will need to draw down on storage in about seven of ten years and will be able to replenish storage in about three years out of ten. This reduction in available supplies extends the time required for storage to recover from drawdowns and could require Metropolitan to implement its Water Supply Allocation Plan during extended dry periods.

As a result of increased State Water Project supplies and reduced demands from 2010 to 2012, Metropolitan rebuilt its storage after several years of withdrawals to approximately 3.375 million acre-feet, including emergency storage. This was the highest end-of-year total water reserves in Metropolitan's history. In 2013, Metropolitan drew 407,000 acre-feet from storage to meet demands, reducing overall storage to 2.968 million acre-feet. Metropolitan withdrew approximately 1.2 million acre-feet from storage in 2014 and 2014 year-end overall storage was approximately 1.8 million acre-feet. The following table shows three years of Metropolitan's water in storage as of January 1, including emergency storage. ~~Metropolitan staff projects that approximately 128,000~~Approximately 127 thousand acre-feet ~~will be~~were withdrawn from ~~dry-year~~ storage reserves in the first six months of 2015, leaving ~~approximately 1.057~~1.72 million acre-feet in ~~dry-year~~ storage reserves as of July 1, 2015. ~~Dry-year storage is total storage, excluding emergency storage.~~Metropolitan staff estimates that the storage reserve level as of December 31, 2015 will be 1.36 million acre-feet.

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METROPOLITAN'S WATER STORAGE CAPACITY AND WATER IN STORAGE⁽¹⁾
(in Acre-Feet)

<u>Water Storage Resource</u>	<u>Storage Capacity</u>	<u>Water in Storage January 1, 2015</u>	<u>Water in Storage January 1, 2014</u>	<u>Water in Storage January 1, 2013</u>
<i>Colorado River Aqueduct</i>				
Desert / CVWD Advance Delivery Account	800,000	249,000	260,000	321,000
Lake Mead ICS	<u>1,500,000</u>	<u>151,000</u>	<u>474,000</u>	<u>580,000</u>
Subtotal	2,300,000	400,000	734,000	901,000
<i>State Water Project</i>				
Arvin-Edison Storage Program	350,000	165,000	180,000	220,000
Semitropic Storage Program	350,000	86,000 <u>186,000</u>	238,000	285,000
Kern Delta Storage Program	250,000	152,000	169,000	179,000
San Bernardino Valley MWD Coordinated Operating Agreement	50,000	-0-	-0-	-0-
Mojave Storage Program	390,000 ⁽⁵⁾	39,000	39,000	60,000
Castaic Lake and Lake Perris ⁽²⁾	219,000	-0-	219,000	219,000
Metropolitan Article 56 Carryover ⁽³⁾	200,000 ⁽⁶⁾	36,000	49,000	156,000
Other State Water Project Carryover ⁽⁴⁾	n/a	-0-	174,000	124,000
		-	<u>334,000</u>	
Emergency Storage	<u>334,000</u>	326,000 <u>328,000</u>		<u>334,000</u>
Subtotal	2,143,000	904,000 <u>906,000</u>	1,402,000	1,577,000
<i>Within Metropolitan's Service Area</i>				
Diamond Valley Lake	810,000	394,000	584,000	690,000
Lake Mathews	182,000	78,000	139,000	102,000
Lake Skinner	<u>44,000</u>	<u>30,000</u>	<u>36,000</u>	<u>38,000</u>
Subtotal⁽⁷⁾	1,036,000	502,000	759,000	830,000
<i>Member Agency Storage Programs</i>				
Cyclic Storage, Conjunctive Use, and Supplemental Storage	455,000 <u>352,000</u> <u>0</u>	25,000 <u>28,000</u>	73,000	<u>67,000</u>
	=	1,831,000 <u>1,836,000</u>	2,968,000	
Total	5,934,000 <u>5,831,000</u>	1,831,000 <u>1,836,000</u>	2,968,000	<u>3,375,000</u>

Source: Metropolitan.

- (1) Water storage capacity and water in storage are measured based on engineering estimates and are subject to change.
- (2) Flexible storage allocated to Metropolitan under its State Water Contract. Withdrawals must be returned within 5 years.
- (3) Article 56 Carryover storage capacity is dependent on the annual State Water Project allocation, which varies from year to year. Article 56 supplies represent water that is allocated to a State Water Project contractor in a given year and carried over to the next year pursuant to the State Water Contract.
- (4) Includes Article 56 Carryover from prior years, non-project carryover, and carryover of curtailed deliveries pursuant to Article 14(b) of Metropolitan's State Water Contract.
- (5) The Mojave Storage Program agreement was amended in 2011 to allow for cumulative storage of up to 390,000 acre-feet.

- (6) Metropolitan’s State Water Project carryover capacity ranges from 100,000 to 200,000 acre-feet, on a sliding scale that depends on the final State Water Project allocation. At allocations of 50 percent or less, Metropolitan may store 100,000 acre-feet, and at allocations of 75 percent or greater, Metropolitan may store up to 200,000 acre-feet. For the purposes of this table, the highest possible carryover capacity is displayed.
- (7) Includes 292,000 acre-feet of emergency storage in Metropolitan’s reservoirs ~~in 2013 and 2014, and 298,000 acre-feet in 2015.~~

Water Conservation

The central objective of Metropolitan’s water conservation program is to help ensure adequate, reliable and affordable water supplies for Southern California by actively promoting efficient water use. The importance of conservation to the region has increased in recent years because of drought conditions in the State Water Project watershed and court-ordered restrictions on Bay-Delta pumping, as described under “—State Water Project” above. Water conservation is an integral component of Metropolitan’s IRP Strategy, WSDM plan and Water Supply Allocation Plan, each described in this Appendix A under “METROPOLITAN’S WATER SUPPLY.”

Metropolitan’s conservation program has largely been developed to assist its member agencies in meeting the “best management practices” (“BMP”) of the California Urban Water Conservation Council’s Memorandum of Understanding Regarding Urban Water Conservation in California (“CUWCC MOU”) and to meet the conservation goals of the 2010 IRP Update. See “—Integrated Water Resources Plan” above. Under the terms of the CUWCC MOU and Metropolitan’s Conservation Credits Program, Metropolitan assists and co-funds member agency conservation programs designed to achieve greater water use efficiency in residential, commercial, industrial, institutional and landscape uses. Metropolitan uses its Water Stewardship Rate, which is charged for every acre-foot of water conveyed by Metropolitan, together with available grant funds, to fund conservation incentives and other water management programs. All users of Metropolitan’s system benefit from the system capacity made available by investments in demand management programs like the Conservation Credits Program. See “METROPOLITAN REVENUES—Rate Structure—*Water Stewardship Rate*” in this Appendix A. Direct spending by Metropolitan on active conservation incentives, including rebates for water-saving plumbing fixtures, appliances and equipment, from fiscal year 1989-90 through fiscal year ~~2013-14~~2014-15 was about ~~\$352 million.~~ ~~In February 2014, Metropolitan increased the conservation budget for fiscal years 2013-14 and 2014-15 by a total of \$20 million.~~ ~~In December 2014, the Board increased the conservation budget for fiscal years 2013-14 and 2014-15 by an additional \$40 million.~~ ~~Also, in May 2014, the Board doubled the incentive for the turf replacement program from \$1 per square foot to \$2 per square foot.~~ ~~487 million.~~ 487 million. On May 26, 2015, the Board approved an additional \$350 million for Metropolitan’s conservation budget, resulting in total funding of \$450 million over fiscal years 2014-15 and 2015-16. As of ~~May~~August 2015, ~~\$8893~~\$8893 million was rebated and an additional ~~\$124~~120 million has been committed to the turf replacement program. The 2010 Integrated Water Resources Plan Update estimates that 1,037,000 acre-feet of water will be conserved annually in southern California by 2025. See “—Integrated Water Resources Plan” and “—Drought Response Actions” above.

In addition to ongoing conservation, Metropolitan has developed a WSDM plan, which splits resource actions into two major categories: Surplus Actions and Shortage Actions. See — “Water Surplus and Drought Management Plan” below. Conservation and water efficiency programs are part of Metropolitan’s resource management strategy which make up these Surplus and Shortage actions.

Metropolitan’s plan for allocation of water supplies in the event of shortage (the “Water Supply Allocation Plan”; see “—Water Supply Allocation Plan” below) allocates Metropolitan’s water supplies among its member agencies, based on the principles contained in the WSDM plan, to reduce water use and drawdowns from water storage reserves. Metropolitan’s member agencies and retail water suppliers in Metropolitan’s service area also have the ability to implement water conservation and allocation programs, and some of the retail suppliers in Metropolitan’s service area have initiated conservation measures. The success of conservation measures in conjunction with the Water Supply Allocation Plan is evidenced as a contributing factor in the lower than budgeted water sales during fiscal years 2009-10, 2010-11 and 2011-12.

Legislation approved in November 2009 sets a statewide conservation target for urban per capita water use of 20 percent reductions by 2020 (with credits for existing conservation) at the retail level, providing an additional catalyst for conservation by member agencies and retail suppliers. ~~(See “State Water Project Bay Delta Regulatory and Planning Activities” above.)~~ Metropolitan’s water sales projections incorporate an estimate of conservation savings that will reduce retail demands. Current projections include an estimate of additional water use efficiency savings that would result from local agencies reducing their per capita water use in response to the 20 percent by 2020 conservation savings goals required by recent legislation as well as an estimate of additional conservation that would have to occur to reach Metropolitan’s IRP goal of reducing overall regional per capita water use by 20 percent by 2020.

Water Surplus and Drought Management Plan

The WSDM plan, which was adopted by Metropolitan’s Board in April 1999, evolved from Metropolitan’s experiences during the droughts of 1976-77 and 1987-92. The WSDM plan is a planning document that Metropolitan uses to guide inter-year and intra-year storage operations, and splits resource actions into two major categories: surplus actions and shortage actions. The surplus actions emphasize storage of surplus water inside the region, followed by storage of surplus water outside the region. The shortage actions emphasize critical storage programs and facilities and conservation programs that make up part of Metropolitan’s response to shortages. Implementation of the plan is directed by a WSDM team, made up of Metropolitan staff, that meets regularly throughout the year and more frequently between November and April as hydrologic conditions develop. The WSDM team develops and recommends storage actions to senior management on a regular basis and provides updates to the Board on hydrological conditions, storage levels and planned storage actions through detailed reports.

Water Supply Allocation Plan

The Water Supply Allocation Plan was approved by Metropolitan’s Board in February 2008 and has since been implemented three times, including the most recent in April 2015. The Water Supply Allocation Plan provides a formula for equitable distribution of available water supplies in case of extreme water shortages within Metropolitan’s service area. Although the Act gives each of Metropolitan’s member agencies a preferential entitlement to purchase a portion of the water served by Metropolitan (see “METROPOLITAN REVENUES—Preferential Rights”), historically, these rights have not been used in allocating Metropolitan’s water. Metropolitan’s member agencies and retail water suppliers in Metropolitan’s service area also may implement water conservation and allocation programs within their respective service territories in times of shortage.

On December 9, 2014, the Board approved adjustments to the formula for calculating member agency supply allocations for future implementation of the Water Supply Allocation Plan. On April 14, 2015, the Board declared a Water Supply Condition 3 and the implementation of the Water Supply Allocation Plan at a Level 3 Regional Shortage Level, effective July 1, 2015 through June 30, 2016. See “—Drought Response Actions” above. Implementation of the Water Supply Allocation Plan at a Level 3 Regional Shortage Level and response to the Governor’s Order (see “—Drought Response Actions” above) is anticipated to reduce supplies delivered by Metropolitan to Metropolitan’s member agencies ~~by 15 percent and water sales~~ to approximately 1.81.6 million acre-feet in fiscal year 2015-16.

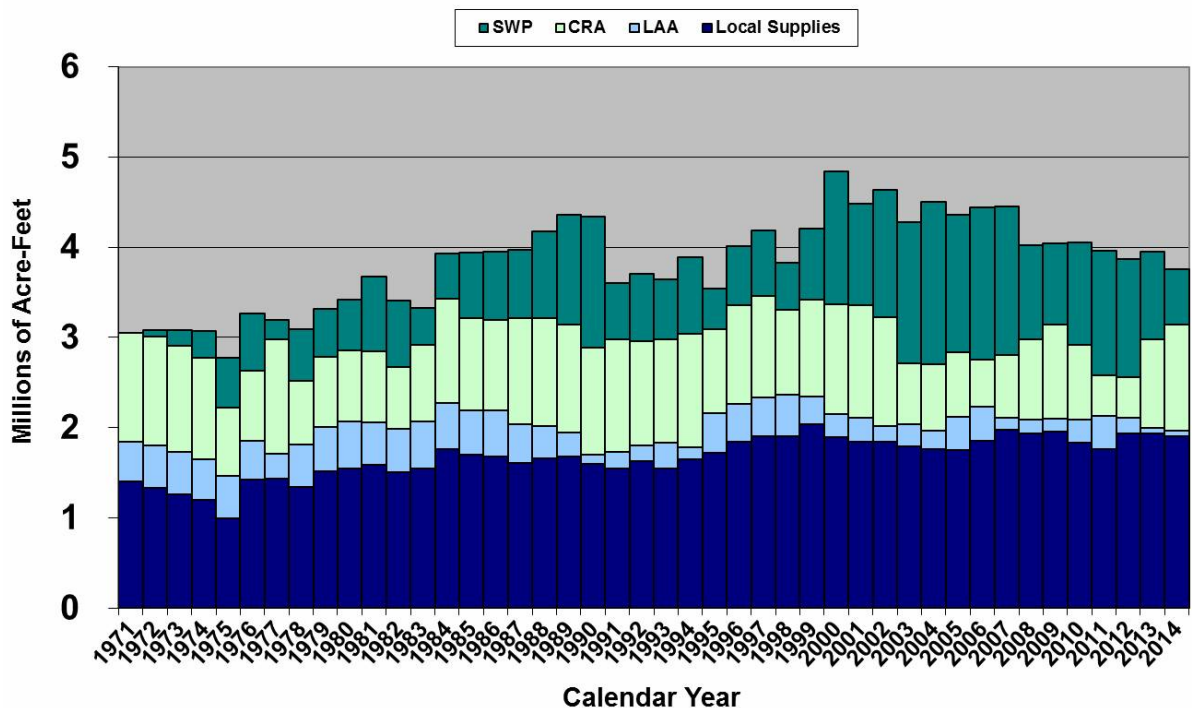
REGIONAL WATER RESOURCES

The water supply for Metropolitan’s service area is provided in part by Metropolitan and in part by non-Metropolitan sources available to members. Approximately 60 percent of the water supply for Metropolitan’s service area is imported water received by Metropolitan from the CRA and the State Water Project and by the City of Los Angeles (the “City”) from the Los Angeles Aqueduct. While the City is one of the largest water customers of Metropolitan, it receives a substantial portion of its water from the Los Angeles Aqueduct and local groundwater supply. The balance of water within the region is produced locally, primarily from groundwater supplies and runoff.

Metropolitan’s member agencies are not required to purchase or use any of the water available from Metropolitan. Some agencies depend on Metropolitan to supply nearly all of their water needs, regardless of the weather. Other agencies, with local surface reservoirs or aqueducts that capture rain or snowfall, rely on Metropolitan more in dry years than in years with heavy rainfall, while others, with ample groundwater supplies, purchase Metropolitan water only to supplement local supplies and to recharge groundwater basins. The demand for supplemental supplies provided by Metropolitan is dependent on water use at the retail consumer level and the amount of locally supplied and conserved water. See “METROPOLITAN’S WATER SUPPLY—Water Conservation” in this Appendix A and “—Local Water Supplies” below. Consumer demand and locally supplied water vary from year to year, resulting in variability in water sales. Future reliance on Metropolitan supplies will be dependent, among other things, on local projects and the amount of water, if any, that may be derived from sources other than Metropolitan. In recent years, supplies and demands have been affected by drought, water use restrictions, economic conditions, weather conditions and environmental laws, regulations and judicial decisions, as described in this Appendix A under “METROPOLITAN’S WATER SUPPLY.” For information on Metropolitan’s water sales revenues, see “METROPOLITAN REVENUES” and “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

The following graph shows a summary of the regional sources of water supply for the years 1971 to 2014. Local supplies available within Metropolitan’s service area are augmented by water imported by the City through the Los Angeles Aqueduct (“LAA”) and Metropolitan supplies provided through the CRA and State Water Project.

Sources of Water Supply in the Metropolitan Service Area (1971-2014)



Source: Metropolitan.

The major sources of water for Metropolitan’s member agencies in addition to supplies provided by Metropolitan are described below.

Los Angeles Aqueduct

The City, through its Department of Water and Power (“LADWP”), operates its Los Angeles Aqueduct system to import water from the Owens Valley and the Mono Basin on the eastern slopes of the Sierra Nevada in eastern California. Prior to the 1990-1991 drought, the City had imported an average of 440,000 acre-feet of water annually from the combined Owens Valley/Mono Basin system, of which about 90,000 acre-feet came from the Mono Basin. Under the Mono Lake Basin Water Right Decision (Decision 1631) issued in September 1994, which revised LADWP’s water rights licenses in the Mono Basin, the City is limited to export 16,000 acre-feet annually from the Mono Basin until it reaches its target elevation of 6,391 feet above mean sea level.

Pursuant to the City’s turnout agreement with DWR, Antelope Valley-East Kern Water Agency (“AVEK”) and Metropolitan, LADWP commenced construction in 2010 of the turnout facilities along the California Aqueduct within AVEK’s service area. Upon completion, expected ~~by late 2015~~, in 2016, the turnout will enable delivery of water from the California Aqueduct to the Los Angeles Aqueduct. Conditions precedent to such delivery of water include obtaining agreements for the transfer of non-State Water Project water directly from farmers, water districts or others in Northern and Central California, available capacity in the California Aqueduct and compliance with State Water Project water quality requirements. The agreement allows for use of the turnout for delivery of non-State Water Project water ~~annually~~ to the City in amounts not to exceed the supplies lost to the City as a result of its Eastern Sierra environmental obligations.

Historically, the Los Angeles Aqueduct and local groundwater supplies have been nearly sufficient to meet the City’s water ~~requirements~~demands during normal water supply years. As a result, prior to the 1990-1991 drought, only about 13 percent of the City’s water needs (approximately 82,000 acre-feet) were supplied by Metropolitan. From fiscal year 2000-01 to fiscal year ~~2010-11~~, 2014-15, approximately 31 to ~~71.75~~ percent of the City’s total water requirements were met by Metropolitan. For the five fiscal years ended June 30, ~~2014~~, 2015, the City’s water deliveries from Metropolitan averaged approximately ~~293,000~~314,000 acre-feet per year, which constituted approximately ~~53.57~~ percent of the City’s total water supply. Deliveries from Metropolitan to the City during this period varied between approximately 166,000 acre-feet per year and approximately 442,000 acre-feet per year. See “METROPOLITAN REVENUES—Principal Customers” in this Appendix A. According to LADWP’s Year 2010 Urban Water Management Plan, the City is planning to increase locally-developed supplies including recycled water, new conservation, stormwater capture and local groundwater from the average for the five-year period ending June 30, 2010 of 12 percent to 43 percent of its normal year supplies by fiscal year 2034-35. Accordingly, the City’s reliance on Metropolitan supplies will decrease from the five year average ending June 30, 2010 of 52 percent to 24 percent of its normal year supplies by fiscal year 2034-35. However, the City may still purchase up to 511,000 acre-feet per year or 82 percent of its dry year supplies from Metropolitan until 2035. This corresponds to an increase from normal to dry years of approximately 257,000 acre-feet in potential demand for supplies from Metropolitan.

LADWP analyzed the additional impacts to the Los Angeles Aqueduct’s water supply deliveries for various environmental projects aimed at improving air quality and fish and riparian habitat in the Owens Valley. LADWP reports that, in 2013, 62 percent of its Los Angeles Aqueduct water was devoted to dust and environmental mitigation projects in the Owens Valley and Eastern Sierra, resulting in the need to purchase an equivalent amount of Metropolitan supply. In November 2014, LADWP reached an agreement over implementation of dust control measures on Owens Lake, which is expected to save nearly 8,600 acre-feet of water in 2015 and expand water savings in the future.

Local Water Supplies

Local water resources include groundwater production, recycled water production and diversion of surface flows. While local water resources are non-Metropolitan sources of water supply, Metropolitan has executed agreements for storage of Metropolitan supplies in local groundwater basins and provided incentives for local supply development ~~as described below~~. Metropolitan’s primary incentive program for local supply development is the Local Resource Program (“LRP”), which provides financial incentives up to

\$340 per acre-foot of water production from local water recycling, groundwater recovery and seawater desalination projects. Member agencies and other local agencies have also independently funded and developed additional local supplies, including groundwater storage and clean-up, recycled water and desalination of brackish or high salt content water.

Metropolitan's water sales projections are based in part on projections of locally-supplied water. Projections of future local supplies are based on estimated yields from sources and projects that are currently producing water or are under construction at the time a water sales projection is made. Additional reductions in Metropolitan's water sales projections are made to account for future local supply augmentation projects, based on the 2010 IRP Update goals. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Projections" and "METROPOLITAN'S WATER SUPPLY—Integrated Water Resources Plan" in this Appendix A.

Groundwater. Demands for about 1.5 million acre-feet per year, about one-third of the annual water demands for approximately 18.5 million residents of Metropolitan's service area, are met from groundwater production. Local groundwater supplies are supported by recycled water, which is blended with imported water and recharged into groundwater basins, and also used for creating seawater barriers that protect coastal aquifers from seawater intrusion.

Groundwater Storage Programs. Metropolitan has executed agreements with a number of agencies to develop groundwater storage projects in its service area. These projects are designed to help meet the water delivery reliability goals of storing surplus imported supplies when available so that local agencies can withdraw stored groundwater during droughts or other periods of water supply shortage. In 2000, Metropolitan was allocated \$45 million in State Proposition 13 bond proceeds to develop groundwater storage projects in Metropolitan's service area. The nine projects provide about ~~212,000~~210,000 acre-feet of groundwater storage and have a combined extraction capacity of about 70,000 acre-feet per year. During fiscal year 2008-09, over 70,000 acre-feet of stored water was produced and sold from these storage accounts. Fiscal year 2009-10 sales from the nine accounts totaled nearly 41,000 acre-feet, leaving a balance of approximately 26,000 acre-feet in the storage accounts. Metropolitan began refilling the programs in fiscal year 2010-11. As of ~~October 2014,~~June 2015, the balance in the nine accounts was approximately ~~49,000~~20,000 acre-feet. Metropolitan ~~has called~~ nearly 40,000 ~~the remaining~~ acre-feet to be produced from these storage accounts during the ~~15~~12-month period from ~~April 2014~~July 2015 through June ~~2015-~~2016. See table "Metropolitan's Water Storage Capacity and Water in Storage" under "METROPOLITAN'S WATER SUPPLY—Storage Capacity and Water in Storage" in this Appendix A.

Recovered Groundwater. Contamination of groundwater supplies is a growing threat to local groundwater production. Metropolitan has been supporting increased groundwater production and improved regional supply reliability by offering financial incentives to agencies for production and treatment of degraded groundwater since 1991. Metropolitan has executed agreements with local agencies to provide financial incentives to 24 projects that recover contaminated groundwater with total contract yields of about 112,500 acre-feet per year. During fiscal year ~~2013-14,~~2014-15, Metropolitan provided incentives for approximately ~~68,400~~45,000 acre-feet of recovered water under these agreements. Total groundwater recovery use under executed agreements is expected to grow to ~~76,000~~88,000 acre-feet in ~~2015-~~2020.

Surface Runoff. Local surface water resources consist of runoff captured in storage reservoirs and diversions from streams. Since 1980, agencies have used an average of 116,000 acre-feet per calendar year of local surface water. Local surface water supplies are heavily influenced by year to year local weather conditions, varying from a high of 188,000 acre-feet in calendar year 1998 to a low of 65,000 acre-feet in calendar year 2003.

Conjunctive Use. Conjunctive use is accomplished when groundwater basins are used to store imported supplies during water abundant periods. The stored water is used during shortages and emergencies with a corresponding reduction in surface deliveries to the participating agencies. Regional benefits include

enhancing Metropolitan's ability to capture excess surface flows during wet years from both the State Water Project and Colorado River. Groundwater storage is accomplished using spreading basins, injection wells, and in-lieu deliveries where imported water is substituted for groundwater, and the groundwater not pumped is considered stored water.

Metropolitan has promoted conjunctive use at the local agency level under its Replenishment Service Program by discounting rates for imported water placed into groundwater or reservoir storage during wet months. The discounted rate and program rules encouraged construction of additional groundwater production facilities allowing local agencies to be more self-sufficient during shortages. (See "*Groundwater Storage Programs*" above.) In calendar year 2006, Metropolitan delivered approximately 247,000 acre-feet of water as replenishment water. In calendar year 2007, Metropolitan delivered approximately 46,000 acre-feet of water as replenishment water through May 1, 2007 then discontinued such deliveries until May 10, 2011 when Metropolitan's Board authorized sale of up to 225,000 acre-feet of discounted replenishment service deliveries to member agencies for the remainder of calendar year 2011. In calendar year 2011, Metropolitan delivered approximately 225,000 acre-feet of this discounted replenishment water. No replenishment sales were budgeted for fiscal year 2012-13 and thereafter. The Replenishment Service Program was discontinued effective December 31, 2012. See "METROPOLITAN REVENUES—Classes of Water Service—*Replenishment*" and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Projections" in this Appendix A.

Recycled Water. Metropolitan has supported recycled water use to offset water demands and improve regional supply reliability by offering financial incentives to agencies for production and sales of recycled water since 1982. Metropolitan has executed agreements with local agencies to provide financial incentives to 75 recycled water projects with total contract yields of about 306,400 acre-feet per year. During fiscal year ~~2013-14, 2014-15~~, Metropolitan provided incentives for approximately 180,000 acre-feet of reclaimed water under these agreements. Total recycled water use under executed agreements is expected to ~~grow to about 187,000~~ be approximately 166,000 acre-feet by ~~2015-2020~~.

Seawater Desalination. Metropolitan's IRP includes seawater desalination as a core local supply and supports foundational actions to lay the groundwork for accelerating seawater desalination development as needed in the future. To encourage local development, Metropolitan has signed Seawater Desalination Program ("SDP") incentive agreements with three of its member agencies: Long Beach, Municipal Water District of Orange County ("MWDOC") and West Basin Municipal Water District. The SDP agreements provide incentives to the member agencies of up to \$250 per acre-foot when the desalinated supplies are produced. Agreement terms are for the earlier of 25 years or through 2040 and are designed to phase out if Metropolitan's rates surpass the unit cost of producing desalinated seawater. SDP agreements are subject to final approval by Metropolitan's Board after review of the complete project description and environmental documentation. These projects are currently in the development phase and collectively are anticipated to produce up to 46,000 acre-feet annually. In addition, in October 2014, seawater desalination projects became eligible for funding under Metropolitan's Local Resources Program (~~"LRP"~~).

In November 2012, SDCWA approved a water purchase agreement with Poseidon Resources LLC ("Poseidon Resources") for a seawater desalination project in Carlsbad (the "Carlsbad Project") to provide a minimum of 48,000 acre-feet and a maximum of 56,000 acre-feet of desalinated supplies to SDCWA per year. The Carlsbad Project ~~is under construction and~~ is anticipated to be completed ~~in~~ by the ~~fall~~ end of 2015.

Other seawater desalination projects that could provide supplies to Metropolitan's service area are under development or consideration. Poseidon Resources is developing a 56,000 acre-feet per year plant in Huntington Beach which is currently in the permitting phase. SDCWA is studying the potential for a seawater desalination plant in Camp Pendleton which would initially produce up to 56,000 acre-feet per year and potentially up to 168,000 acre-feet per year with a phased build out. ~~SDCWA, in collaboration with Mexican government agencies, also is considering a 56,000 acre-foot per year facility in Rosarito Beach,~~

~~Mexico. If developed, SDCWA could receive a portion of the desalinated supplies through a delivery pipeline across the international border to SDCWA.~~ Otay Water District, located in San Diego County along the Mexico border, is ~~separately~~ considering the feasibility of purchasing water from ~~an alternative~~ privately-developed seawater desalination project ~~at the same site~~ in Rosarito Beach, Mexico. The 56,000 to 112,000 AFY project is in the pilot testing phase, and could also supply Metropolitan's service area through exchange agreements. Approvals from a number of U.S. and Mexican federal agencies, along with State and local approvals, would be needed for ~~either~~ the cross-border project to proceed.

METROPOLITAN'S WATER DELIVERY SYSTEM

Method of Delivery

Metropolitan's water delivery system is made up of three basic components: the CRA, the California Aqueduct of the State Water Project and Metropolitan's internal water distribution system. Metropolitan's delivery system is integrated and designed to meet the differing needs of its member agencies. Metropolitan seeks redundancy in its delivery system to assure reliability in the event of an outage. Current system expansion and other improvements will be designed to increase the flexibility of the system. Since local sources of water are generally used to their maximum each year, growth in the demand for water is partially met by Metropolitan. Accordingly, the operation of Metropolitan's water system is being made more reliable through the rehabilitation of key facilities as needed, improved preventive maintenance programs and the upgrading of Metropolitan's operational control systems. See "CAPITAL INVESTMENT PLAN" in this Appendix A.

Colorado River Aqueduct. Work on the CRA commenced in 1933 and water deliveries started in 1941. Additional facilities were completed by 1961 to meet additional requirements of Metropolitan's member agencies. The CRA is 242 miles long, starting at the Lake Havasu intake and ending at the Lake Mathews terminal reservoir. Metropolitan owns all of the components of the CRA, which include five pump plants, 64 miles of canal, 92 miles of tunnels, 55 miles of concrete conduits and 144 underground siphons totaling 29 miles in length. The pumping plants lift the water approximately 1,617 feet over several mountain ranges to Metropolitan's service area. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct" in this Appendix A.

State Water Project. The initial portions of the State Water Project serving Metropolitan were completed in 1973. State Water Project facilities are owned and operated by DWR. Twenty-nine agencies have entered into contracts with DWR to receive water from the State Water Project. See "METROPOLITAN'S WATER SUPPLY—State Water Project" in this Appendix A.

Internal Distribution System. Metropolitan's internal water distribution system includes components that were built beginning in the 1930s and through the present. Metropolitan owns all of these components, including 14 dams and reservoirs, five regional treatment plants, over 800 miles of transmission pipelines, feeders and canals, and 16 hydroelectric plants with an aggregate capacity of 131 megawatts.

Diamond Valley Lake. Diamond Valley Lake, a man-made reservoir located southwest of the city of Hemet, California, covers approximately 4,410 acres and has capacity to hold approximately 810,000 acre-feet or 265 billion gallons of water. Diamond Valley Lake was constructed to serve approximately 90 percent of Metropolitan's service area by gravity flow. ~~Associated hydraulic structures consist of an inlet-outlet tower, pumps and generating facilities, a pressure control facility, connecting tunnels and a forebay.~~ Imported water is delivered to Diamond Valley Lake during surplus periods. The reservoir provides more reliable delivery of imported water from the State Water Project and the CRA during summer months, droughts and emergencies. In addition, Diamond Valley Lake is capable of providing more than one-third of Southern California's water needs from storage for approximately six months after a major earthquake (assuming that there has been no impairment of Metropolitan's internal distribution network). See the table "Metropolitan's Water Storage Capacity and Water in Storage" under "METROPOLITAN'S WATER SUPPLY—Storage Capacity and Water in Storage" in this Appendix A for the amount of water in storage at Diamond Valley Lake. Excavation at the project site began in May 1995. Diamond Valley Lake was completed in March 2000, at a total cost of \$2 billion, and was in full operation in December 2001.

Inland Feeder. The Inland Feeder is a 44-mile-long conveyance system that connects the State Water Project to Diamond Valley Lake and the CRA. The Inland Feeder provides greater flexibility in managing Metropolitan's major water supplies and allows greater amounts of State Water Project water to be accepted during wet seasons for storage in Diamond Valley Lake. In addition, the Inland Feeder increases

the conveyance capacity from the East Branch of the State Water Project by 1,000 cfs, allowing the East Branch to operate up to its full capacity. Construction of the Inland Feeder was completed in September 2009 at a total cost of \$1.14 billion.

Operations Control Center. Metropolitan's water conveyance and distribution system operations are coordinated from the Operations Control Center ("OCC") located in the Eagle Rock area of Los Angeles. The OCC plans, balances and schedules daily water and power operations to meet member agencies' demands, taking into consideration the operational limits of the entire system.

Water Treatment

Metropolitan filters and disinfects water at five water treatment plants: the F.E. Weymouth Treatment Plant, the Joseph Jensen Treatment Plant, the Henry J. Mills Treatment Plant, the Robert B. Diemer Treatment Plant and the Robert A. Skinner Treatment Plant. The plants treat an average of between 1.7 billion and 2.0 billion gallons of water per day, and have a maximum capacity of approximately 2.6 billion gallons per day. Approximately 60 percent of Metropolitan's water deliveries are treated water.

Federal and state regulatory agencies continually monitor and establish new water quality standards. New water quality standards could affect availability of water and impose significant compliance costs on Metropolitan. The Safe Drinking Water Act ("SDWA") was amended in 1986 and again in 1996. The SDWA establishes drinking water quality standards, monitoring, public notification and enforcement requirements for public water systems. To achieve these objectives, the U.S. Environmental Protection Agency ("USEPA"), as the lead regulatory authority, promulgates national drinking water regulations and develops the mechanism for individual states to assume primary enforcement responsibilities. ~~The California Department of Public Health ("CDPH"), formerly known as the Department of Health Services,~~For the first time in more than 30 years, the USEPA recently revised the federal Water Quality Standards ("WQS") regulation that helps to implement the Clean Water Act ("CWA"). As a result of the WQS changes, states and authorized tribes may need to consider and implement new provisions, or revise existing provisions, in their WQS. Also, WQS may be used in determining National Pollutant Discharge Elimination System permit limits or in implementing other CWA programs. The revised WQS regulation becomes effective on October 20, 2015. The SWRCB Division of Drinking Water ("DDW") has lead authority over California water agencies. Metropolitan continually monitors new water quality laws and regulations and frequently comments on new legislative proposals and regulatory rules.

~~In October 2007, Metropolitan began adding fluoride to treated water at all five of its treatment plants for regional compliance with Assembly Bill 733, enacted in 1995, which requires fluoridation of any public water supply with over 10,000 service connections in order to prevent tooth decay, subject to availability of sufficient funding. Design and construction of the fluoridation facilities at Metropolitan's five treatment plants were funded primarily by a \$5.5 million grant from the California Dental Association Foundation, in conjunction with the California Fluoridation 2010 Work Group. On August 9, 2011, four individuals filed litigation (*Foli, et al. v. Metropolitan Water District of Southern California, et al.*) in federal district court alleging deprivation of civil rights, impairment of civil rights and unfair competition based on fluoridation of Metropolitan's treated water deliveries. On April 10, 2012 the court granted Metropolitan's motion to dismiss the case without prejudice. Plaintiffs filed a first amended complaint on April 24, 2012. Metropolitan's motion to dismiss the first amended complaint was granted on January 25, 2013, dismissing the case with prejudice. On February 20, 2013, plaintiffs filed a notice of appeal to the U.S. Court of Appeals for the Ninth Circuit. On February 19, 2015, the Ninth Circuit affirmed the district court's dismissal of the case. Plaintiffs had 90 days from the date of the decision to file a petition for writ of certiorari in the Supreme Court. [Court dockets are being checked to confirm that no filing has been made.]~~

~~*Disinfection By products.* As part of the requirements of the SDWA, the USEPA is required to establish regulations to strengthen protection against microbial contaminants and reduce potential health risks from disinfection by products. Disinfectants and disinfection by products ("DBPs" and, together with~~

disinfectants, “D/DBPs”) were addressed by the USEPA in two stages. In the Stage 1 Disinfectants and Disinfection Byproducts Rule (“Stage 1 DBPR”), the maximum contaminant level (“MCL”) for one of the classes of DBPs, total trihalomethanes (“TTHM”), was lowered from 100 parts per billion (“ppb”) to 80 ppb. MCLs were also set for haloacetic acids (“HAA”) and bromate (an ozone DBP). In addition, the Stage 1 DBPR includes a treatment requirement to remove disinfection by-product precursors. Compliance with these requirements started in January 2002. Metropolitan already satisfied these requirements for its Colorado River Water, which has lower levels of disinfection by-product precursors than State Water Project water. State Water Project water has a greater amount of disinfection by-product precursors and modifications to the treatment process have been made to meet the requirements of the Stage 1 DBPR. Longer-term D/DBP control has been achieved by switching to ozone as the primary disinfectant at the Mills, Jensen and Skinner treatment plants. Mills and Jensen treatment plants only receive water from the State Water Project. Ozone facilities at the Mills and Jensen plants began operating in October 2003 and July 2005, respectively. Skinner, Diemer and Weymouth water treatment plants receive a blend of water from the State Water Project and the Colorado River. Ozone facilities at the Skinner plant became operational in October 2010. The Diemer plant is nearing the end of construction of its ozone facilities with an online date anticipated by fall of 2015. Construction of Weymouth ozone facilities is underway and anticipated to be complete in fiscal year 2016-17. See “CAPITAL INVESTMENT PLAN—Major Projects of Metropolitan’s Capital Investment Plan” in this Appendix A. Ozone will enable these plants to reliably treat water containing higher blends of State Project water and still meet the new microbial and D/DBP standards, while also improving the aesthetics, such as taste and odor, of water delivered to consumers.

The second stage of the D/DBP Rule (“Stage 2 DBPR”) was finalized in January 2006. The Stage 2 DBPR requires water systems to meet the TTHM and HAA standards at individual monitoring locations in the distribution system as opposed to a distribution system wide average under the Stage 1 DBPR. Metropolitan does not anticipate any further capital improvements in order to meet the Stage 2 DBPR requirements.

The Interim Enhanced Surface Water Treatment Rule and the Long Term 2 Enhanced Surface Water Treatment Rule (“LT2ESWTR”) have been implemented to simultaneously provide protection against microbial pathogens while the D/DBP rules provide reduced risk from disinfection by products. Metropolitan does not anticipate any further capital improvements in order to meet the LT2ESWTR requirements.

Perchlorate.—Perchlorate, used in solid rocket propellants, munitions and fireworks, has contaminated some drinking water wells and surface water sources throughout California. Perchlorate also has been detected in Metropolitan’s Colorado River water supplies. A chemical manufacturing facility near Lake Mead in Nevada is a primary source of the contamination. Remediation efforts began in 1998 and have been successful at meeting the cleanup objectives, significantly reducing the levels of perchlorate entering into the Colorado River. CDPH has established a primary drinking water standard (i.e., an MCL) of 6 ppb for perchlorate. Current perchlorate levels in Metropolitan’s Colorado River supplies are below 2 ppb.

Chromium 6.—Hexavalent chromium or chromium 6 is one of several forms of chromium that occur in natural waters in the environment. Chromium 6 is the relatively more harmful form of chromium that is regulated under the public health standard MCL of 50 ppb for “total” chromium. The California Department of Public Health filed the final regulation for chromium 6 on April 15, 2014, setting a new MCL of 10 ppb. The new MCL became effective July 1, 2014, and water utilities will be required to comply with such MCL by the end of 2015. Since monitoring began in 1998, chromium 6 in Metropolitan’s treated water has ranged from non-detect (less than 0.03 ppb) to less than 1 ppb. Metropolitan expects that the recently adopted chromium 6 regulation will not materially affect the water supply to Metropolitan or result in significant compliance costs.

~~*Arsenic.* The federal and state MCL for arsenic in drinking water is 10 ppb. Arsenic levels in Metropolitan's treated water supplies ranged from not detected (less than 2 ppb) to 2.7 ppb in 2012, which is within the historically expected range.~~

Seismic Considerations

General. Although the magnitude of damages resulting from a significant seismic event are impossible to predict, Metropolitan's water conveyance and distribution facilities are designed to either withstand a maximum probable seismic event or to minimize the potential repair time in the event of damage. The five pumping plants on the CRA have been buttressed to better withstand seismic events. Other components of the CRA are monitored for any necessary rehabilitation and repair. Metropolitan personnel and independent consultants periodically reevaluate the internal water distribution system's vulnerability to earthquakes. As facilities are evaluated and identified for seismic retrofitting, they are prioritized, with those facilities necessary for delivering or treating water scheduled for upgrade before non-critical facilities. However, major portions of the California Aqueduct and the CRA are located near major earthquake faults, including the San Andreas Fault. A significant earthquake could damage structures and interrupt the supply of water, adversely affecting Metropolitan's revenues and its ability to pay its obligations. Therefore, emergency supplies are stored for use throughout Metropolitan's service area, and a six-month reserve supply of water normally held in local storage (including emergency storage in Diamond Valley Lake) provides reasonable assurance of continuing water supplies during and after such events.

Metropolitan has an ongoing surveillance program that monitors the safety and structural performance of its 14 dams and reservoirs. Operating personnel perform regular inspections that include monitoring and analyzing seepage flows and pressures. Engineers responsible for dam safety review the inspection data and monitor the horizontal and vertical movements for each dam. Major on-site inspections are performed at least twice each year. Instruments that transmit seismic acceleration time histories for analysis any time a dam is subjected to strong motion during an earthquake are located at a number of selected sites.

In addition, Metropolitan has developed an emergency plan that calls for specific levels of response appropriate to an earthquake's magnitude and location. Included in this plan are various communication tools as well as a structured plan of management that varies with the severity of the event. Pre-designated personnel follow detailed steps for field facility inspection and distribution system patrol. Approximately 40 employees are designated to respond immediately under certain identifiable seismic events. An emergency operations center is maintained at the OCC. The OCC, which is specifically designed to be earthquake resistant, contains communication equipment, including a radio transmitter, microwave capability and a response line linking Metropolitan with its member agencies, DWR, other utilities and the State's Office of Emergency Services.

Metropolitan also maintains machine, fabrication and coating shops at its facility in La Verne, California. Several construction contracts have been completed over the last few years to upgrade and expand these shops. A total of nearly \$37 million has been invested to enhance Metropolitan's capacity to not only provide fabrication and coating services for planned rehabilitation work, maintenance activities, and capital projects, but to also perform emergency fabrication support to Metropolitan and its member agencies. Metropolitan has also maintained reimbursable agreements with DWR to perform machining, fabrication, and coating services for critical repair and rehabilitation of State Water Project facilities. These agreements have enhanced timely and cost-effective emergency response capabilities. Materials to fabricate pipe and other appurtenant fittings are kept in inventory at the La Verne site. In the event of earthquake damage, Metropolitan has taken measures to provide the design and fabrication capacity to fabricate pipe and related fittings. Metropolitan is also staffed to perform emergency repairs and has pre-qualified contractors for emergency repair needs at various locations throughout Metropolitan's service area.

State Water Project Facilities. The California Aqueduct crosses all major faults either by canal at ground level or by pipeline at very shallow depths to ease repair in case of damage from movement along a fault. State Water Project facilities are designed to withstand major earthquakes along a local fault or magnitude 8.1 earthquakes along the San Andreas Fault without major damage. Dams, for example, are designed to accommodate movement along their foundations and to resist earthquake forces on their embankments. Earthquake loads have been taken into consideration in the design of project structures such as pumping and power plants. The location of check structures on the canal allows for hydraulic isolation of the fault-crossing repair.

While the dams, canals, pump stations and other constructed State Water Project facilities have been designed to withstand earthquake forces, the critical supply of water from Northern California must traverse the Bay-Delta through hundreds of miles of varying levels of engineered levees that are susceptible to major failures due to flood and seismic risk. In the event of a failure of the Bay-Delta levees, the quality of the Bay-Delta's water could be severely compromised as salt water comes in from the San Francisco Bay. Metropolitan's supply of State Water Project water would be adversely impacted if pumps that move Bay-Delta water southward to the Central Valley and Southern California are shut down to contain the salt water intrusion. Metropolitan estimates that stored water supplies, CRA supplies and local water resources that would be available in case of a levee breach or other interruption in State Water Project supplies would meet demands in Metropolitan's service area for approximately twelve months. See "METROPOLITAN'S WATER SUPPLY—Storage Capacity and Water in Storage" in this Appendix A. Since the State and Federal governments control the Bay-Delta levees, repair of any levee failures would be the responsibility of and controlled by the State and Federal governments.

Metropolitan, in cooperation with the State Water Contractors, developed recommendations to DWR for emergency preparedness measures to maintain continuity in export water supplies and water quality during emergency events. These measures include improvements to emergency construction materials stockpiles in the Bay-Delta, improved emergency contracting capabilities, strategic levee improvements and other structural measures of importance to Bay-Delta water export interests, including development of an emergency freshwater pathway to export facilities in a severe earthquake. DWR utilized \$12 million in fiscal year 2007-08 for initial stockpiling of rock for emergency levee repairs and development of Bay-Delta land and marine loading facilities and has identified future funding for expanded stockpiles.

Perris Dam. Perris Dam forms Lake Perris, the terminal reservoir for the State Water Project in Riverside County, with maximum capacity of approximately 130,000 acre-feet of water. DWR reported in July 2005 that seismic studies indicate that DWR's Perris Dam facility could sustain damage from moderate earthquakes along the San Jacinto or San Andreas faults due to potential weaknesses in the dam's foundation. In late 2005, DWR lowered the water level in the reservoir by about 25 feet and reduced the amount of water stored in the reservoir to about 75,000 acre-feet as DWR evaluated alternatives for repair of the dam. In December 2006, DWR completed a study identifying various repair options, began additional geologic exploration along the base of Perris Dam and started preliminary design. DWR's preferred alternative is to repair the dam to restore the reservoir to its historical level. On November 11, 2011, DWR certified the final EIR and filed a Notice of Determination stating its intent to proceed with the preferred alternative. DWR estimates that repairs will cost approximately \$141 million to be completed in mid-2017. Under the original allocation of joint costs for this facility, the State would have paid approximately six percent of the repair costs. However, because of the recreational benefit this facility provides to the public, the Legislature has approved a recommendation from DWR that the State assume 32.2 percent of these repair costs. The remaining 67.8 percent of repairs costs will be paid for by the three agencies that use the water stored in Lake Perris: Metropolitan (42.9 percent), Desert Water Agency (3.0 percent) and Coachella Valley Water District (21.9 percent). See "METROPOLITAN EXPENDITURES—State Water Contract Obligations" in this Appendix A.

Security Measures

Metropolitan conducts ground and air patrols of the CRA and monitoring and testing at all treatment plants and along the CRA. Similarly, DWR has in place security measures to protect critical facilities of the State Water Project, including both ground and air patrols of the State Water Project.

Although Metropolitan has constructed redundant systems and other safeguards to ensure its ability to continually deliver water to its customers, and DWR has made similar efforts, a terrorist attack or other security breach against water facilities could materially impair Metropolitan's ability to deliver water to its customers, its operations and revenues and its ability to pay its obligations.

CAPITAL INVESTMENT PLAN

General Description

Metropolitan’s current Capital Investment Plan (the “Capital Investment Plan” or “CIP”) involves expansion and rehabilitation of existing facilities and construction of new facilities to meet future water demands, ensure system reliability as well as enhance operational efficiency and flexibility, and comply with water quality regulations. Metropolitan’s CIP is regularly reviewed and updated. Implementation and construction of specific elements of the program are subject to Board approval, and the amount and timing of borrowings will depend upon, among other factors, status of construction activity and water demands within Metropolitan’s service area. From time to time projects that have been undertaken are delayed, redesigned or deferred by Metropolitan for various reasons and no assurance can be given that a project in the CIP will be completed in accordance with its original schedule or that any project will be completed as currently planned.

Projection of Capital Investment Plan Expenditures

The table below sets forth the projected CIP expenditures in the adopted biennial budget for fiscal years 2014-15 and 2015-16, including replacement and refurbishment expenditures, by project type for the fiscal years ending June 30, ~~2015-2016~~ through ~~2019-2020~~. This estimate is updated bi-annually as a result of the periodic review and adoption of the capital budget by Metropolitan’s Board of Directors. See “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

**CAPITAL INVESTMENT PLAN
PROJECTION OF EXPENDITURES^{(1) (2)}
(Fiscal Years Ended June 30 - Dollars in Thousands)**

<u>Cost of Service</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>Total</u>
Conveyance & Aqueduct	\$27,193	\$22,311	\$27,168	\$46,281 <u>46,281</u>	\$46,119	<u>\$44,588</u>	\$169,072 <u>186,467</u>
Storage	12,244	12,562	1,999	-	-	=	26,805 <u>14,561</u>
Distribution	43,508	51,642	69,826	112,699	135,673	<u>157,608</u>	413,348 <u>517,448</u>
Treatment	126,149	148,652	121,390	95,124	79,270	<u>73,772</u>	570,585 <u>518,208</u>
Administrative and General	28,109	30,393	50,357	26,484	23,214	<u>16,719</u>	158,557 <u>147,167</u>
Hydroelectric	8,212	<u>2,308</u>	<u>4,067</u>	<u>467</u>	<u>120</u>	<u>686</u>	15,174 <u>7,648</u>
Total⁽²⁾	\$245,415⁽³⁾	\$267,868	\$274,807	\$281,055	\$284,396	<u>\$293,373</u>	\$1,353,541 <u>1,401,499</u>

Source: Metropolitan.

- (1) Fiscal ~~year 2014-15~~ years ~~2015-16~~ through ~~2018-19~~ 2019-20 based on the adopted biennial budget for fiscal years 2014-15 and 2015-16. Totals are rounded.
- (2) Annual totals include replacement and refurbishment expenditures for fiscal years ~~2014-2015-15~~ 2015-16 through ~~2018-19~~ 2019-20 of ~~\$139 million, \$162 million, \$159 million, \$223 million, \$250 million, and \$250~~ 267 million, respectively, for a total of ~~\$932 million~~ 1.06 billion for fiscal years ~~2014-15~~ 2015-16 through ~~2018-19~~ 2019-20.
- (3) ~~Revised projections as of March 31, 2015 for fiscal year 2014-15 Capital Investment Plan expenses are \$215 million~~

The above projections do not include amounts for contingencies, but include escalation at 2.77 percent per year for projects for which formal construction contracts have not been awarded. Additional capital costs may arise in the future as a result of, among other things, federal and State water quality regulations, project changes and mitigation measures necessary to satisfy environmental and regulatory requirements, and for additional facilities. See “METROPOLITAN’S WATER DELIVERY SYSTEM—Water Treatment” in this Appendix A.

Capital Investment Plan Financing

The CIP will require funding from debt financing (see “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A) as well as from pay-as-you-go funding. The Board has adopted an internal funding objective to fund all capital program expenditures required for replacements and refurbishments of Metropolitan facilities from current revenues. However, in order to reduce drawdowns of reserve balances and to mitigate financial risks that could occur in upcoming years, actual pay-as-you-go funding has been less than projected amounts during fiscal years 2007-08 through 2012-13. During this period, pay-as-you-go funding was reduced to \$256 million, rather than the \$521 million originally projected. For fiscal year 2013-14, the pay-as-you-go funding for the capital program was \$117 million. On April 8, 2014, Metropolitan’s Board approved a total of \$466 million for pay-as-you-go expenditures as part of the biennial budget for fiscal year 2014-15 and fiscal year 2015-16. These pay-as-you-go funds, together with funds available in the Replacement and Refurbishment Fund, ~~are~~were expected to fund \$513 million in CIP expenditures for fiscal year 2014-15 and fiscal year 2015-16. As in prior years, pay-as-you-go funding may be reduced or increased by the Board during the fiscal year. To limit the accumulation of cash and investments in the Replacement and Refurbishment Fund, the maximum balance in this fund at the end of each fiscal year will be \$160 million. Amounts above the \$160 million limit will be transferred to the Revenue Remainder Fund and may be used for any lawful purpose. See “METROPOLITAN REVENUES—Financial Reserve Policy” in this Appendix A. The remainder of capital program expenditures will be funded through the issuance from time to time of water revenue bonds, which are payable from Net Operating Revenues. Metropolitan’s budget assumptions for the adopted biennial budget for fiscal years 2014-15 and 2015-16 provide for the issuance of no additional water revenue bonds to fund the CIP in fiscal years 2014-15 through 2016-17, \$40 million of water revenue bonds in fiscal year 2017-18, ~~and~~\$100 million of water revenue bonds in fiscal year 2018-19. — —19 and \$110 million in fiscal year 2019-20. The cost of these projected bond issues are reflected in the financial projections under “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

On July 14, 2015, Metropolitan’s Board authorized the use of tax-exempt bond proceeds or other forms of indebtedness to reimburse up to \$300 million of CIP expenditures for projects funded from Metropolitan’s General Fund and the Replacement and Refurbishment Fund. On October 13, 2015, Metropolitan’s Board will consider for adoption an ordinance that would make certain findings that are required prior to the issuance of new revenue bonds. If the ordinance is adopted, Metropolitan’s Board could then consider whether to authorize the issuance of various revenue bonds, not to exceed \$500 million in total, that could be used to reimburse pay-as-you-go expenditures for the CIP as described above and for future capital program expenditures.

Major Projects of Metropolitan’s Capital Investment Plan

Oxidation Retrofit Facilities. The oxidation retrofit facilities program includes the design and construction of oxidation facilities and appurtenances at all of Metropolitan’s treatment plants. This program is intended to allow Metropolitan to meet drinking water standards for disinfection by-products and reduce taste and odor incidents. The first phase of the oxidation retrofit program, at Metropolitan’s Henry J. Mills Treatment Plant in Riverside County, was completed in 2003. Oxidation retrofit at the Joseph Jensen Treatment Plant was completed July 1, 2005. The cost for these two projects was approximately \$236.4 million. Oxidation retrofit at the Robert A. Skinner plant was substantially completed in December 2009 and

operational in 2010, with follow-up work completed in June 2014. Expenditures at the Skinner plant through ~~December 2014~~June 2015 were ~~\$243.5~~243.3 million. Total oxidation program costs at the Skinner plant are estimated to be \$245.5 million. Construction of the oxidation retrofit facilities at the Robert B. Diemer Treatment Plant was completed in June 2013. All testing and start-up work ~~is planned to be complete in 2015~~was completed in 2015 and the new facilities are in full operation. Program expenditures at the Diemer plant through ~~December 2014~~June 2015 were ~~\$358.9~~360.5 million and the total program cost is projected to be \$370.0 million. The construction contract for the Weymouth oxidation facilities, the last Metropolitan treatment plant to be retrofitted, was awarded in June 2012. Oxidation program costs at the F.E. Weymouth ~~plant~~Treatment Plant, based upon the adopted budget, were estimated to be \$338.5 million. Due to the ongoing highly competitive bidding environment, the awarded construction contract was more than \$100 million below the budgeted amount. Expenditures at the Weymouth plant through ~~December 2014~~June 2015 were ~~\$170.5~~190.2 million and completion is expected in fiscal year 2016-17. Total oxidation program costs at the F.E. Weymouth plant are estimated to be \$270.0 million.

F.E. Weymouth Treatment Plant Improvements. The F.E. Weymouth Treatment Plant was built in 1938 and subsequently expanded several times over the following 25 years. It is Metropolitan's oldest water treatment facility. Metropolitan has completed several upgrades and refurbishment/replacement projects to maintain the plant's reliability and improve its efficiency. These include power systems upgrades, a residual solids dewatering facility, refurbishment/replacement of the mechanical equipment in two of the eight flocculation and settling basins, a new plant maintenance facility, new chemical feed systems and storage tanks, replacement of the plant domestic/fire water system, seismic upgrades to the plant inlet structure, and a new chlorine handling and containment facility. During the past fiscal year, seismic retrofit of the filter buildings was completed. Planned projects over the next several years include refurbishment of the plant's filters and settling basins, seismic retrofits to the ~~filter buildings and~~ administration building, and replacement of the valves used to control filter operation. The cost estimate for all prior and projected improvements at the Weymouth plant, not including the ozone facilities, is approximately \$422.5 million, with ~~\$202.7~~210.8 million spent through ~~December 2014~~June 2015. Budgeted aggregate capital expenditures for improvements at the Weymouth plant for fiscal years 2014-15 and 2015-16 are \$42.8 million.

Robert B. Diemer Treatment Plant Improvements. The Robert B. Diemer Treatment Plant was built in 1963 and subsequently expanded in 1968. It is Metropolitan's second oldest water treatment facility and has a capacity to treat 520 million gallons of water a day. Several upgrades and refurbishment/replacement projects have been completed at the Diemer plant, including power system upgrades, a new residual solids dewatering facility, new vehicle and plant maintenance facilities, new chemical feed systems and storage tanks, a new chlorine handling and containment facility, construction of a roller-compacted concrete slope stabilization system and a new secondary access road. Planned projects over the next several years include refurbishment of the plant's settling basins, seismic retrofits to the filter buildings and administration building, and replacement of the valves used to control filter operation. The current cost estimate for all prior and projected improvements at the Diemer Treatment Plant, not including the ozone facilities, is approximately ~~\$384.6~~384.3 million, with ~~\$197.2~~206.6 million spent through ~~December 2014~~June 2015. Budgeted aggregate capital expenditures for improvements at the Diemer plant for fiscal years 2014-15 and 2015-16 are \$59.4 million.

Colorado River Aqueduct Facilities. Deliveries through the CRA began in 1941. Through annual inspections and maintenance activities, the performance and reliability of the various components of the CRA are regularly evaluated. A major overhaul of the pump units at the five pumping plants was completed in 1988. Refurbishment or replacement of many of the electrical system components, including the transformers, circuit breakers and motor control centers, is currently under way. Projects completed over the past 10 years include replacement of high voltage circuit breakers and transformers at the five pumping plant switchyards, refurbishment of operators and power centers on the head gates downstream of the pumping plants, refurbishment/replacement of 15 isolation/control gates, replacement of cast iron pipe and other components at over 200 outlet structures with stainless steel components, replacement of pumping plant inlet trash racks, replacement of several miles of deteriorated concrete canal liner, and replacement of the outlet

gates and appurtenant electrical, mechanical, and control systems at the Copper Basin Reservoir. Additionally, many of the mechanical components at all five pumping plants will be evaluated and replaced or refurbished over the next several years. The currently projected cost estimate for all prior and planned refurbishment or replacement projects is \$468.2 million. Costs through ~~December 2014~~ June 2015 were ~~\$169.8~~ 173.7 million. Budgeted aggregate capital expenditures for improvements on the CRA for fiscal years 2014-15 and 2015-16 are \$53.3 million.

Distribution System – Prestressed Concrete Cylinder Pipe. Metropolitan’s distribution system (see “METROPOLITAN’S WATER DELIVERY SYSTEM” in this Appendix A) is comprised of approximately 830 miles of pipelines ranging in diameter from 30 inches to over 200 inches. 163 miles of the distribution system is made up of prestressed concrete cylinder pipe (“PCCP”). In response to PCCP failures experienced by several water agencies, Metropolitan initiated the PCCP Assessment Program in December 1996 to evaluate the condition of Metropolitan’s PCCP lines and investigate inspection and refurbishment methods. As a result, Metropolitan has identified and made repairs to several sections of PCCP. The costs for these repairs through ~~December 2014~~ June 2015 were ~~\$65.3~~ 72.8 million. Rather than continue to make spot repairs to pipe segments, Metropolitan has initiated a long-term capital program to rehabilitate approximately 100 miles of PCCP in five pipelines. This rehabilitation, which is currently planned to consist of relining the pipelines with a steel liner, will be performed in stages to minimize delivery impacts to customers. The first PCCP line planned for relining is the Second Lower Feeder. Approximately 30 miles of this line are constructed of PCCP, with diameters ranging from 78 to 84 inches. This effort is anticipated to take 8 to 10 years to complete at a cost of approximately \$500 million. Final design is currently underway. Design for rehabilitation of the remaining four pipelines will be initiated over the next several years. The estimated cost to reline all 100 miles of PCCP is approximately \$2.6 billion.

Distribution System – Refurbishments and Improvements. In addition to the long-term program to rehabilitate Metropolitan’s PCCP lines, several other components of the distribution system are being refurbished and/or improved. Past and ongoing projects to ensure the reliability of the distribution system, primarily due to age, include multiple replacements or refurbishments of isolation and control valves and gates, refurbishment to pressure control and hydroelectric power facilities, and various other upgrades totaling approximately ~~\$160~~ 167.6 million through ~~December 2014~~ June 2015. The currently projected cost estimate for the prior and planned refurbishment or replacement projects is \$600 million. For fiscal years 2014-15 and 2015-16, budgeted aggregate capital expenditures for improvements on the distribution system, other than PCCP rehabilitation, are \$53.4 million.

Also, as a result of the current statewide drought, Metropolitan initiated a project to enable reverse-flow through a series of existing pipelines to deliver water stored in Diamond Valley Lake to Metropolitan’s Henry J. Mills ~~Water~~ Treatment Plant, which has historically received only raw water from DWR’s State Water Project. Construction contracts were awarded in June and August 2014 to complete this effort. The total estimated cost for this project was approximately \$37 million. The majority of the work to allow reverse-flow deliveries from Diamond Valley Lake was completed in April 2015. Costs through April 2015 were approximately ~~\$30~~ 31.6 million.

METROPOLITAN REVENUES

General

Until water deliveries began in 1941, Metropolitan’s activities were, by necessity, supported entirely through the collection of *ad valorem* property taxes. Since the mid-1980s, water sales revenues have provided approximately 75 to 85 percent of total revenues and *ad valorem* property taxes have accounted for about 10 percent of revenues, declining to six percent of revenues in fiscal year 2013-14. See “— Revenue Allocation Policy and Tax Revenues” below. The remaining revenues have been derived principally from the sale of hydroelectric power, interest on investments and additional revenue sources (water standby charges and availability of service charges) beginning in 1993. *Ad valorem* taxes do not constitute a part of

Operating Revenues and are not available to make payments with respect to the water revenue bonds issued by Metropolitan.

Generally, Metropolitan has constitutional and statutory authority, and voter authorization, to levy *ad valorem* property taxes to pay its outstanding general obligation bonds and to satisfy its State Water Contract obligations. From fiscal year 1990-91 through 2012-13, *ad valorem* taxes were applied solely to pay annual debt service on Metropolitan's general obligation bonds and a small portion of State Water Contract obligations, pursuant to requirements in the Act that limit property tax collections to the amount necessary to pay annual debt service on Metropolitan's general obligation bonds plus the portion of its State Water Contract payment obligation outstanding as of 1990-91 attributable to the debt service on State general obligation bonds for facilities benefitting Metropolitan. Under this requirement, Metropolitan's *ad valorem* property tax revenue gradually decreases, as the bonds are retired. However, the Act permits Metropolitan to set aside the prescribed reductions in the tax rate if the Board, following a public hearing with 10 days' prior written notice to the Speaker of the California Assembly and the President pro Tempore of the Senate, finds that revenue in excess of the restriction is "essential to the fiscal integrity of the district." On June 11, 2013, following such public hearing, the Board adopted a resolution finding that maintaining the *ad valorem* tax rate for fiscal year 2013-14 at the fiscal year 2012-13 tax rate was essential to the fiscal integrity of Metropolitan and suspending the tax limit clause in the Act. On August 19, ~~2014, 2014~~ and on August 18, 2015, following the required hearing and notice, the Board adopted a resolution finding that continuing the *ad valorem* tax rate at the rate levied for fiscal year 2013-14 ~~and 2014-15, respectively~~ was essential to the fiscal integrity of Metropolitan and suspending the tax limit clause in the Act. Factors considered by the Board included current and future State Water Contract payment obligations and the proper mechanisms for funding them, the appropriate mix of property taxes and water rates and charges to enhance Metropolitan's fiscal stability and a fair distribution of costs across Metropolitan's service area. On August 20, ~~2013 and 2013~~, August 19, 2014, ~~and August 18, 2015~~, the Board adopted resolutions levying taxes for fiscal years 2013-~~14 and 14~~, 2014-15, ~~and 2015-16, respectively~~, at the tax rate levied for fiscal year 2012-13 (0.0035 percent of assessed valuation, excluding annexation levies).

The basic rate for untreated water for domestic and municipal uses is \$593 per acre-foot for Tier 1 water, effective January 1, 2014. This rate decreased to \$582 effective January 1, 2015 and will increase to \$594 effective January 1, 2016. See "—Rate Structure" and "—Water Rates by Water Category" below. The *ad valorem* tax rate for Metropolitan purposes has gradually been reduced from a peak equivalent rate of 0.1250 percent of full assessed valuation in fiscal year 1945-46 to 0.0035 percent of full assessed valuation for fiscal year ~~2014-15-2015-16~~. The rates charged by Metropolitan represent the wholesale cost of Metropolitan water to its member agencies, and not the cost of water to the ultimate consumer. Metropolitan does not exercise control over the rates charged by its member agencies or their subagencies to their customers.

Summary of Receipts by Source

The following table sets forth Metropolitan's sources of receipts for the five fiscal years ended June 30, ~~2014, 2015~~. The table provides cash basis information, which is unaudited. Audited financial statements for the fiscal years ended June 30, ~~2014, 2015~~ and June 30, ~~2013, 2014~~ are provided in Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT ~~FOR FISCAL YEAR ENDED JUNE 30, 2014~~ AND BASIC FINANCIAL STATEMENTS FOR ~~THE NINE MONTHS FISCAL YEARS ENDED MARCH 31, JUNE 30, 2015 and 2014 (UNAUDITED), AND JUNE 30, 2014.~~"

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SUMMARY OF RECEIPTS BY SOURCE⁽¹⁾
Fiscal Years Ended June 30
(Dollars in Millions)

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Water Sales ⁽²⁾	\$1,011.1	\$995.6	\$1,062.5	\$1,250.9	\$1,455.3	<u>\$1,448.7</u>
Net Tax Collections ⁽³⁾	97.3	88.0	90.1	96.5	98.4	<u>103.0</u>
Additional Revenue Sources ⁽⁴⁾	135.3	153.5	167.1	174.2	179.8	<u>200.1</u>
Interest on Investments	26.7	18.9	17.8	11.7	14.8	<u>17.0</u>
Hydroelectric Power Sales	18.8	22.1	31.0	26.3	15.2	<u>8.3</u>
Other Collections & Trust Funds ⁽⁵⁾	9.1	61.0	53.6	19.9	20.7	<u>85.0</u>
Total Receipts	\$1,298.3	\$1,339.1	\$1,422.1	\$1,579.5	\$1,784.2	<u>\$1,862.1</u>

Source: Metropolitan.

- (1) Does not include any proceeds from the sale of bonded indebtedness.
- (2) Gross receipts in each year are for sales in the twelve months ended April 30 of such year. Water sales revenues include revenues from water wheeling and exchanges. See “METROPOLITAN REVENUES—Wheeling and Exchange Charges” in this Appendix A. Includes \$25.7 million in fiscal year 2010-~~11~~,11 from the Calleguas Municipal Water District related to termination of the Las Posas water storage program.
- (3) *Ad valorem* taxes levied by Metropolitan are applied solely to the payment of outstanding general obligation bonds of Metropolitan and to State Water Contract obligations.
- (4) Includes receipts derived from water standby charges, readiness-to-serve, and capacity charges. See “—Rate Structure” and “—Additional Revenue Components” below.
- (5) In fiscal year 2010-11 includes \$10.8 million reimbursement from State Proposition 13 bond funds and \$28.2 million from the termination of the Las Posas water storage program. In fiscal year 2011-12, includes \$27.5 million from CVWD for delivery of 105,000 acre-feet under an exchange agreement between Metropolitan and CVWD. In fiscal year 2014-15, includes the transfer of \$78.1 million from the Water Management Fund, which funded a like amount of water conservation and water purchase expenditures. See “METROPOLITAN EXPENDITURES—Summary of Expenditures”, in this Appendix A.

Revenue Allocation Policy and Tax Revenues

The Board determines the water revenue requirement for each fiscal year after first projecting the *ad valorem* tax levy for that year. The tax levy for any year is subject to limits imposed by the State Constitution, the Act and Board policy and to the requirement under the State Water Contract that in the event that Metropolitan fails or is unable to raise sufficient funds by other means, Metropolitan must levy upon all property within its boundaries not exempt from taxation a tax or assessment sufficient to provide for all payments under the State Water Contract. See “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A. From fiscal year 1990-91 through 2012-13, and pursuant to statute, the tax levy was set to not exceed the amount needed to pay debt service on Metropolitan’s general obligation bonds and to satisfy a portion of Metropolitan’s State Water Contract obligation. However, Metropolitan has authority to impose a greater tax levy to pay debt service on Metropolitan’s general obligation bonds and to satisfy Metropolitan’s State Water Contract obligations in full if, following a public hearing, the Board finds that such revenue is essential to its fiscal integrity. On June 11, ~~2013 and 2013~~, August 19, 2014, and August 17, 2015, the Board suspended the tax limit clause in the Act and, for fiscal years 2013-~~14 and 14~~, 2014-15, and 2015-16, maintained the fiscal year 2012-13 *ad valorem* tax rate. See “METROPOLITAN REVENUES—General” above. Any deficiency between tax levy receipts and Metropolitan’s share of debt service obligations on general obligation bonded debt issued by the State is expected to be paid from Operating Revenues, as defined in the Master Resolution.

Water Sales Revenues

Authority. Water rates are established by the Board and are not subject to regulation or approval by the Public Utilities Commission of California or by any other local, State or federal agency. In accordance with the Act, water rates must be uniform for like classes of service. Metropolitan has provided three classes of water service: (1) full service; (2) replenishment (discontinued effective December 31, 2012); and (3) interim agricultural (discontinued effective December 31, 2012). See “—Classes of Water Service” below.

No member agency of Metropolitan is obligated to purchase water from Metropolitan. However, 2421 of Metropolitan’s 26 member agencies have entered into ~~voluntary water supply purchase orders for water purchases, which had initial 10-year terms ending December 31, 2012. Twenty-two of such purchase orders have been extended to December 31, 2014, as described under “—Member Agency Purchase Orders” below. On November 18, 2014, the Board approved the terms of new 10-10-year~~ voluntary water supply purchase orders effective ~~January 1, 2015~~ through December 31, 2024. See “—Member Agency Purchase Orders” below. Consumer demand and locally supplied water vary from year to year, resulting in variability in water sales revenues. Metropolitan uses its financial reserves and budgetary tools to manage the financial impact of the variability in revenues due to fluctuations in annual water sales. See “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

Payment Procedure. Water is delivered to the member agencies on demand and is metered at the point of delivery. Member agencies are billed monthly and a late charge of one percent of the delinquent payment is assessed for a payment that is delinquent for no more than five business days. A late charge of two percent of the amount of the delinquent payment is charged for a payment that is delinquent for more than five business days for each month or portion of a month that the payment remains delinquent. Metropolitan has the authority to suspend service to any member agency delinquent for more than 30 days. Delinquencies have been rare; in such instances late charges have been collected. No service has been suspended because of delinquencies.

Water Sales. The following table sets forth the acre-feet of water sold and water sales (including sales from water wheeling and exchanges) for the five fiscal years ended June 30, ~~2014-2015~~. Water sales revenues of Metropolitan for the two fiscal years ended June 30, ~~2014-2015~~ and June 30, ~~2013-2014~~, respectively, on an accrual basis, are shown in Appendix B - “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT ~~FOR FISCAL YEAR ENDED JUNE 30, 2014~~ AND BASIC FINANCIAL STATEMENTS FOR ~~THE NINE MONTHS~~ FISCAL YEARS ENDED ~~MARCH 31, JUNE 30,~~ 2015 ~~and 2014 (UNAUDITED).~~ AND JUNE 30, 2014.”

SUMMARY OF WATER SOLD AND WATER SALES
Fiscal Years Ended June 30

<u>Year</u>	<u>Acre-Feet⁽¹⁾ Sold</u>	<u>Water Sales⁽⁴⁾ (in millions)</u>	<u>Dollars Per Acre Foot⁽⁵⁾</u>	<u>Average Dollars Per 1,000 Gallons</u>
2010	1,857,564	\$1,011.1	\$544	\$1.67
2011 ⁽²⁾	1,632,277	\$995.6	\$610	\$1.87
2012 ⁽³⁾	1,676,855	1,062.5	634	1.94
2013	1,856,685	1,282.5	691	2.12
2014	2,043,720	1,484.6	726	2.23
<u>2014</u>	<u>2,043,720</u>	<u>1,484.6</u>	<u>726</u>	<u>2.23</u>
<u>2015</u>	<u>1,905,502</u>	<u>1,383.0</u>	<u>726</u>	<u>2.23</u>

Source: Metropolitan.

- (1) Year ended April 30 for fiscal years ~~2010-2011~~ and 2012, water sales recorded on a cash-basis. Beginning fiscal year 2012-13 water sales recorded on an accrual basis, with water sales for the fiscal year ended June 30.
- (2) Includes the sale of 34,519 acre-feet and the receipt of \$25.7 million from the Calleguas Municipal Water District related to termination of the Las Posas water storage program.
- (3) Includes 225,000 acre-feet of replenishment sales.
- (4) Water Sales in fiscal years ~~2009-10 through 2010-11~~ and 2011-12 are recorded on a cash basis for sales in the twelve months ended April 30 of such year, with rates and charges invoiced in May and payable by the last business day of June of each year. Water sales for fiscal years 2012-13 ~~and 2013-14~~ thru 2014-15 are recorded on a modified accrual basis for sales in the twelve months ended June 30 of such year, with rates and charges recorded as revenues in the same months as invoiced. Includes revenues from water wheeling and exchanges. See “METROPOLITAN REVENUES—Wheeling and Exchange Charges” in this Appendix A.
- (5) Gross water sales divided by acre-feet sold. An acre-foot is approximately 326,000 gallons. See table entitled “SUMMARY OF WATER RATES” under “-Water Rates by Water Category” below for a description of water rates and classes of service.

Rate Structure

The following rates and charges are elements of Metropolitan’s rate structure for full service water deliveries:

Tier 1 and Tier 2 Water Supply Rates. The Tier 1 and Tier 2 Water Supply Rates are designed to recover Metropolitan’s water supply costs. The Tier 2 Supply Rate is designed to reflect Metropolitan’s costs of acquiring new supplies. Member agencies are charged the Tier 1 or Tier 2 Water Supply Rate for water purchases, as described under “-Member Agency Purchase Orders” below.

System Access Rate. The System Access Rate is intended to recover a portion of the costs associated with the conveyance and distribution system, including capital, operating and maintenance costs. All users (including member agencies and third-party entities wheeling or exchanging water; see “-Wheeling and Exchange Charges” below) of the Metropolitan system pay the System Access Rate.

Water Stewardship Rate. The Water Stewardship Rate is charged on a dollar per acre-foot basis to collect revenues to support Metropolitan’s financial commitment to conservation, water recycling, groundwater recovery and other demand management programs approved by the Board. The Water Stewardship Rate is charged for every acre-foot of water conveyed by Metropolitan because all users of Metropolitan’s system benefit from the system capacity made available by investments in demand management programs.

System Power Rate. The System Power Rate is charged on a dollar per acre-foot basis to recover the cost of power necessary to pump water from the State Water Project and Colorado River through the conveyance and distribution system for Metropolitan’s member agencies. The System Power Rate is charged for all Metropolitan supplies. Entities wheeling non-Metropolitan water supplies will pay the actual cost of

power to convey water on the State Water Project, the CRA or the Metropolitan distribution system, whichever is applicable.

Treatment Surcharge. Metropolitan charges a treatment surcharge on a dollar per acre-foot basis for treated deliveries. The treatment surcharge is set to recover the cost of providing treated water service, including capital and operating cost.

Delta Supply Surcharge. On April 13, 2010, Metropolitan’s Board adopted a Delta Supply Surcharge of \$51 and \$58 per acre-foot, effective January 1, 2011 and January 1, 2012, respectively, and applicable to all Tier 1, Interim Agricultural Water Program and Replenishment water rates. The Delta Supply Surcharge was designed to recover the additional supply costs Metropolitan faces as a result of pumping restrictions associated with the United States Fish and Wildlife Service biological opinion on Delta smelt and other actions to protect endangered fish species. The Delta Surcharge was intended to remain in effect until a long-term solution for the Bay-Delta is achieved. Metropolitan anticipated that the Delta Supply Surcharge would be reduced or suspended as interim Delta improvements ease pumping restrictions, resulting in lower costs for additional supplies. On April 10, 2012, the Board suspended the Delta Supply Surcharge, effective January 1, 2013.

The amount of each of these rates since September 1, 2009, is shown in the table entitled “SUMMARY OF WATER RATES” under “—Water Rates by Water Category” below.

Litigation Challenging Rate Structure

SDCWA filed *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.* on June 11, 2010. The complaint alleges that the rates adopted by the Board on April 13, 2010, which became effective January 1, 2011 and January 1, 2012, misallocate State Water Contract costs to the System Access Rate and the System Power Rate, and thus to charges for transportation of water, and that this results in an overcharge to SDCWA by at least \$24.5 million per year. The complaint alleges that all State Water Project costs should be allocated instead to Metropolitan’s Supply Rate, even though under the State Water Contract Metropolitan is billed separately for transportation, power and supply costs. It states additionally that Metropolitan will overcharge SDCWA by another \$5.4 million per year by including the Water Stewardship Rate in transportation charges. Eight of Metropolitan’s member agencies (the Cities of Glendale, Los Angeles and Torrance, Municipal Water District of Orange County and Foothill, Las Virgenes, Three Valleys and West Basin Municipal Water Districts) answered the complaint in support of Metropolitan. IID joined the litigation in support of SDCWA’s challenge to Metropolitan’s charges for transportation of water, but withdrew and dismissed all claims against Metropolitan with prejudice on October 30, 2013.

The complaint requested a court order invalidating the rates and charges adopted April 13, 2010, and that Metropolitan be mandated to allocate costs associated with State Water Project supplies and the Water Stewardship Rate to water supply charges and not to transportation charges. Rates in effect in prior years are not challenged in this lawsuit. Metropolitan contends that its rates are reasonable, equitably apportioned among its member agencies and lawful, and were adopted under a valid rate structure and cost of service approach developed in a multi-year collaborative process with its member agencies that has been in place since 2002. Nevertheless, to the extent that a court invalidates Metropolitan’s adopted rates and charges, Metropolitan will be obligated to reconsider and modify rates and charges to comply with any court rulings related to Metropolitan’s rates. While components of the rate structure and costs may change as a result of any such rulings, Metropolitan expects that aggregate rates and charges would still recover Metropolitan’s cost of service. As such, revenues would not be affected. If Metropolitan's rates are revised in the manner proposed by SDCWA in the complaint, other member agencies may pay higher rates unless other actions are taken by the Board.

SDCWA filed its First Amended Petition for Writ of Mandate and Complaint on October 27, 2011, adding five new claims to this litigation, two of which were eliminated from the case on January 4, 2012. The three remaining new claims are for breach of the water exchange agreement between Metropolitan and SDCWA (described herein under “METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct—*Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*”) based on allegedly illegal calculation of rates; improper exclusion of SDCWA’s payments under this exchange agreement from calculation of SDCWA’s preferential rights to purchase Metropolitan supplies (see “—Preferential Rights” below); and illegality of the “rate structure integrity” provisions ~~provisions~~ provision in conservation and local resources incentive agreements between Metropolitan and SDCWA. Such “rate structure integrity” ~~provisions permit~~ provision permits the Board to terminate incentives payable under conservation and local resources incentive agreements between Metropolitan and a member agency due to certain actions by the member agency to challenge the rates that are the source of incentive payments. In June 2011, Metropolitan’s Board authorized termination of two incentive agreements with SDCWA under the “rate structure integrity” ~~provisions~~ provision in such agreements after SDCWA filed its initial complaint challenging Metropolitan’s rates. SDCWA filed a Second Amended Petition for Writ of Mandate and Complaint on April 17, 2012, which contains additional allegations but no new causes of action.

On June 8, 2012, SDCWA filed a new lawsuit challenging the rates adopted by Metropolitan on April 10, 2012 and effective on January 1, 2013 and January 1, 2014. See “—Rate Structure” above and “—Water Rates by Water Category” below for a description of Metropolitan’s water rate structure and the rates and charges adopted on April 10, 2012. The complaint contains allegations similar to those in the Second Amended Petition for Writ of Mandate and Complaint and new allegations asserting that Metropolitan’s rates, adopted in April 2012, violate Proposition 26. See “—California Ballot Initiatives” below for a description of Proposition 26. Metropolitan contends that its rates adopted on April 10, 2012 are reasonable, equitably apportioned among its member agencies and lawful and were adopted under a valid rate structure and cost of service approach. Ten of Metropolitan’s member agencies (the eight member agency parties to SDCWA’s first lawsuit, Eastern Municipal Water District and Western Municipal Water District of Riverside County) answered the complaint in support of Metropolitan and IID joined the litigation in support of SDCWA. Subsequently, IID dismissed all claims with prejudice in this second case too, and the City of Glendale withdrew from both cases.

SDCWA filed a Third Amended Petition for Writ of Mandate and Complaint on January 23, 2013, to add new allegations that Metropolitan’s rates adopted in April 2010 did not meet the requirements of Proposition 26, approved by California voters in November 2010. The court granted Metropolitan’s motion to strike allegations relating to Proposition 26 on March 29, 2013, expressly ruling that SDCWA may not allege a violation of Proposition 26 in its challenge to the rates adopted in April 2010. This ruling does not affect SDCWA’s separate challenge to Metropolitan’s rates adopted in April 2012, which also includes Proposition 26 allegations. On December 4, 2013, the court granted Metropolitan’s motion for summary adjudication of the cause of action alleging illegality of the “rate structure integrity” provision in conservation and local resources incentive agreements, dismissing this claim in the first lawsuit.

Trial of the first phase of both lawsuits before the Superior Court of California, County of San Francisco (Case Nos. CPF-10-510830 and CPF-12-512466) concluded January 23, 2014. This phase concerned the challenges to Metropolitan’s rates. On April 24, 2014, the court issued its “Statement of Decision on Rate Setting Challenges,” determining that SDCWA prevailed on two of its claims and that Metropolitan prevailed on the third claim. The court found that there was not sufficient evidence to support Metropolitan’s inclusion in its transportation rates, and hence in its wheeling rate of 100 percent, of ~~either~~ (1) payments it makes to the California Department of Water Resources for the State Water Project, or (2) ~~all of~~ the costs incurred by Metropolitan for conservation and local water supply development programs recovered through the Water Stewardship Rate. The trial court decision stated that the System Access Rate, System Power Rate, Water Stewardship Rate and wheeling rate violate specified statutes and the common law and such rates effective in 2013 and 2014 violate Proposition 26. The court found that SDCWA failed to prove

its “dry-year peaking” claim that Metropolitan’s rates do not adequately account for variations in member agency purchases.

SDCWA’s claims asserting breach of the ~~Exchange Agreement~~exchange agreement and miscalculation of preferential rights were tried in a second phase of the case which concluded April 30, 2015. On August 28, 2015, the trial court issued a final statement of decision for the second phase. The decision finds in favor of SDCWA on both claims and that SDCWA is entitled to damages in the amount of \$188,295,602 plus interest. The trial court’s rulings, including the decision that specific rates violate certain laws, are subject to appeal to the California court of appeals. Metropolitan is unable to assess at this time the likelihood of success of this litigation, any possible appeal ~~by SDCWA~~ or any future claims.

Due to SDCWA’s litigation challenging Metropolitan’s rates, as of ~~March~~August 31, 2015, Metropolitan held ~~\$170~~209.8 million in its financial reserves pursuant to the exchange contract between Metropolitan and SDCWA. Of that amount, \$192.3 million is associated with exchange water deliveries from January 2011 through December 2014, and \$17.5 million is associated with exchange water deliveries since January 2015. See “—Financial Reserve Policy” below. Amounts held pursuant to the Exchange Agreement will continue to accumulate based on the quantities of exchange water that Metropolitan provides to SDCWA and the amount of charges disputed by SDCWA.

In May 2014, SDCWA filed a new lawsuit asserting essentially the same rate claims and breach of contract claim in connection with the Board’s April 2014 rate adoption. Metropolitan filed its answer on June 30, 2014. On February 9, 2015, pursuant to stipulation by the parties, the court ordered that the case be stayed. The stay may be lifted upon motion by any party. Metropolitan is unable to assess at this time the likelihood of success of this case, any possible appeal or any future claims.

Member Agency Purchase Orders

~~Purchase Orders~~Member Agency purchase orders are voluntary agreements that determine the amount of water that a member agency can purchase at the Tier 1 Supply Rate. ~~In 2001, twenty-four of Metropolitan’s 26 member agencies executed purchase orders for an aggregate of 12.5 million acre-feet of water over the ten years ending December 31, 2012. On November 8, 2011, Metropolitan’s Board authorized the General Manager to execute a withdrawal of the City of Compton’s purchase order committing to purchase 33,720 acre-feet over the original ten-year period. The withdrawal was effective January 1, 2003. On October 10, 2012, the Board authorized the General Manager to execute an amended and restated purchase order to provide a two-year extension of existing member agency purchase orders, previously set to expire on December 31, 2012. Twenty-two of the 23 remaining purchase orders were extended to December 31, 2014. As of February 1, 2014, all purchase order commitments were met.~~ On November 18, 2014, the Board approved the terms for purchase orders with a ~~ten-10~~-year term to be effective from January 1, 2015 through December 31, ~~2024~~, and ~~authorized the General Manger to execute those~~2024. Twenty-one purchase orders were executed. In consideration of executing ~~its~~a purchase order, each member agency ~~that executes a purchase order and~~ whose purchase order is in effect ~~will be~~is allowed to purchase up to 90 percent of its base amount at the Tier 1 ~~Water~~ Supply Rate in any fiscal year during the term of the purchase order. Member agencies ~~may choose~~chose a base amount of either (1) the member agency’s highest fiscal year purchases during the 13-year period of fiscal year 1990 through fiscal year 2002, or (2) the highest year purchases in the most recent 12-year period of fiscal year 2003 through fiscal year 2014. Amounts purchased by such agencies over the applicable base amount will be priced at the Tier 2 ~~Water~~ Supply Rate. See “—Rate Structure—*Tier 1 and Tier 2 Water Supply Rates*” above. Member agencies that accrue a cumulative Tier 2 obligation by virtue of exceeding their Tier 1 maximum at the end of year five of the purchase order will pay their Tier 2 obligation annually. Otherwise, any obligation to pay the Tier 2 Supply Rate will be calculated over the ten-year period, consistent with the calculation of any purchase order commitment obligation. Member agencies that do not have purchase orders in effect are subject to Tier 2 ~~Water~~ Supply Rates for amounts exceeding 60 percent of their base amount (equal to the member agency’s highest fiscal year demand between 1989-90 and 2001-02) annually.

Under each purchase order, a member agency agrees to purchase, over the term of the contract, an amount of water equal to at least 60 percent of the chosen base period demand multiplied by the number of years in the contract. Member agencies are allowed to vary their purchases from year to year, but a member agency will be obligated to pay for the full amount committed under the purchase order, even if it does not take its full purchase order commitment by the end of the contract period.

Classes of Water Service

Full Service Water. Full service water service, formerly known as non-interruptible water service, includes water sold for domestic and municipal uses. Full service treated water rates are the sum of the applicable supply rate, system access rate, water stewardship rate, system power rate and treatment surcharge. Full service untreated water rates are the sum of the applicable supply rate, system access rate, water stewardship rate and system power rate. Full service water sales are the major component of Metropolitan water sales.

Interim Agricultural Water Program. This program provided a discounted rate for agricultural water users that, pursuant to the Act, were permitted to receive only surplus water not needed for domestic or municipal purposes. Metropolitan delivered approximately 40,000 acre-feet of agricultural water under this program in fiscal year 2009-10, approximately 21,000 acre-feet in fiscal year 2010-11 and approximately 29,000 acre-feet in fiscal year 2011-12. On October 14, 2008, the Board approved annual reductions of the Interim Agricultural Water Program discount beginning January 1, 2010 and discontinuance of the program when the discount reached zero on January 1, 2013.

Replenishment. Under the Replenishment Service Program, water was sold at a discounted rate to member agencies, subject to interruption upon notice by Metropolitan. The program allowed Metropolitan to deliver surplus imported water to local groundwater basins and surface storage facilities when supplies were available, with the intent that member agencies could reduce imported water deliveries from Metropolitan during periods of high demand, emergencies or times of shortage. See table entitled “SUMMARY OF WATER RATES” below.

On December 11, 2012, Metropolitan’s Board eliminated the Replenishment Service Program and approved adjustments to increase member agency Tier 1 limits to reflect the historical demand for water used for long-term groundwater and surface storage replenishment. See “—Rate Structure—Tier 1 and Tier 2 Water Supply Rates” above. Water for groundwater replenishment now is priced at applicable full service rates. This adjustment provides additional Tier 1 limits for member agencies that historically purchased water for long-term replenishment purposes and limits their exposure to the higher Tier 2 rates.

Water Rates by Water Category

The following table sets forth Metropolitan’s water rates by category beginning January 1, 2010. See also “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Revenues” in this Appendix A. In addition to the base rates for untreated water sold in the different classes of service, the columns labeled “Treated” include the surcharge that Metropolitan charges for water treated at its water treatment plants. See “—Rate Structure” and “—Classes of Water Service” above for a description of current rates. See “—Litigation Challenging Rate Structure” above for a description of litigation challenging Metropolitan’s water rates.

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**SUMMARY OF WATER RATES
(Dollars per Acre-Foot)**

	<u>SUPPLY RATE</u>		<u>SYSTEM ACCESS RATE</u>	<u>WATER STEWARDSHIP RATE</u>	<u>SYSTEM POWER RATE</u>	<u>TREATMENT SURCHARGE</u>
	<u>Tier 1</u>	<u>Tier 2</u>				
	January 1, 2010	\$170 ⁽¹⁾	\$280	\$154	\$41	\$119
January 1, 2011	\$155 ⁽²⁾	\$280	\$204	\$41	\$127	\$217
January 1, 2012	\$164 ⁽²⁾	\$290	\$217	\$43	\$136	\$234
January 1, 2013	\$140	\$290	\$223	\$41	\$189	\$254
January 1, 2014	\$148	\$290	\$243	\$41	\$161	\$297
January 1, 2015*	\$158	\$290	\$257	\$41	\$126	\$341
January 1, 2016*	\$156	\$290	\$259	\$41	\$138	\$348

	<u>FULL SERVICE TREATED⁽³⁾</u>		<u>FULL SERVICE UNTREATED⁽⁴⁾</u>		<u>INTERIM AGRICULTURAL PROGRAM</u>		<u>REPLENISHMENT RATE</u>	
	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 1</u>	<u>Tier 2</u>	<u>Treated</u>	<u>Untreated</u>	<u>Treated</u>	<u>Untreated</u>
	January 1, 2010	\$701	\$811	\$484	\$594	\$615	\$416	\$558
January 1, 2011	\$744	\$869	\$527	\$652	\$687	\$482	\$601	\$409
January 1, 2012	\$794	\$920	\$560	\$686	\$765	\$537	\$651	\$442
January 1, 2013	\$847	\$997	\$593	\$743	**	**	**	**
January 1, 2014	\$890	\$1,032	\$593	\$735	**	**	**	**
January 1, 2015*	\$923	\$1,055	\$582	\$714	**	**	**	**
January 1, 2016*	\$942	\$1,076	\$594	\$728	**	**	**	**

Source: Metropolitan.

* Rates effective January 1, 2015 and January 1, 2016 were adopted by Metropolitan’s Board on April 8, 2014.

** The Interim Agricultural Water Program and Replenishment Service Program were discontinued after 2012.

(1) Includes \$69 per acre-foot Delta Supply Surcharge, which replaced Water Supply Surcharge.

(2) Includes \$51 and \$58 per acre-foot Delta Supply Surcharge for January 1, 2011 and January 1, 2012, respectively.

(3) Full service treated water rates are the sum of the applicable Supply Rate, System Access Rate, Water Stewardship Rate, System Power Rate and Treatment Surcharge.

(4) Full service untreated water rates are the sum of the applicable Supply Rate, System Access Rate, Water Stewardship Rate and System Power Rate.

Additional Revenue Components

The following paragraphs describe the additional charges for the availability of Metropolitan’s water:

Readiness-to-Serve Charge. This charge is designed to recover the portion of capital expenditures for infrastructure projects needed to provide standby service and peak conveyance needs. The Readiness-to-Serve Charge (“RTS”) is allocated to each member agency in proportion to the rolling ten-year share of firm deliveries through Metropolitan’s system. The RTS generated ~~\$133.9 million in fiscal year 2011-12,~~ \$144.0 million in fiscal year 2012-13, ~~and~~ \$154.0 million in fiscal year 2013-14, 14, and \$162.0 million in 2014-15. Based on the adopted rates and charges, the RTS is projected to generate ~~\$162 million in fiscal year 2014-15,~~ and \$155.5 million in fiscal year 2015-16.

Water Standby Charges. The Board is authorized to impose water standby or availability of service charges. In May 1993, the Board imposed a water standby charge for fiscal year 1993-94 ranging from \$6.94 to \$15 for each acre or parcel less than an acre within Metropolitan's service area, subject to specified exempt categories. Water standby charges have been continued at the same rate in each year since 1993-94. Standby charges are assessments under the terms of Proposition 218, a State constitutional ballot initiative approved by the voters on November 5, 1996. See "—California Ballot Initiatives" below.

Member agencies have the option to utilize Metropolitan's existing standby charge authority as a means to collect all or a portion of their RTS charge. Standby charge collections are credited against the member agencies' RTS charges. See "—Readiness-to-Serve Charge" above. Twenty-two member agencies collect their RTS charges through standby charges. For fiscal years ~~2011-12~~, 2012-13, ~~and~~ 2013-14, and 2014-15, RTS charges collected by means of such standby charges were ~~\$41.741.6~~ million, ~~\$41.641.7~~ million, and \$41.7 million, respectively.

Capacity Charge. The Capacity Charge is a fixed charge intended to recover the cost of providing peak capacity within the distribution system. It is levied on the maximum summer day demand placed on Metropolitan's system between May 1 and September 30 for the three-calendar-year period ended December 31 two years prior to the date of the capacity charge. Effective January 1, 2014, the Capacity Charge was \$8,600 per cfs. The adopted Capacity Charge was \$11,100 per cfs on January 1, 2015, and will be \$10,900 per cfs on January 1, 2016.

Financial Reserve Policy

Metropolitan's reserve policy currently provides for a minimum unrestricted reserve balance at June 30 of each year that is based on probability studies of the wet periods that affect Metropolitan's water sales. The policy establishes a minimum targeted unrestricted reserve level based on an 18-month revenue shortfall estimate and a target level based on an additional two years revenue shortfall estimate. Funds representing the minimum reserve level are held in the Revenue Remainder Fund, and any funds in excess of the minimum reserve level are held in the Water Rate Stabilization Fund. Metropolitan established the Water Rate Stabilization Fund for the principal purpose of maintaining stable and predictable water rates and charges. Funds above the target reserve level may be utilized for pay-as-you-go funding of capital expenditures, for the redemption, defeasance or purchase of outstanding bonds or for any lawful purpose of Metropolitan, as determined by the Board, provided that Metropolitan's fixed charge coverage ratio, which measures the total coverage of all fixed obligations (which includes all revenue bond debt service obligations, State Water Contract capital payments paid from current year operations and subordinate obligations) after payment of operating expenditures, is at or above ~~1.2~~ 1.2 times. See "CAPITAL INVESTMENT PLAN—Capital Investment Plan Financing" in this Appendix A.

~~As of June 30, 2014, On May 26, 2015, Metropolitan's Board approved the use of \$160 million of unrestricted reserves, above the target reserve level, for conservation incentives. In addition, \$50 million from the Water Stewardship Fund and \$140 million from the Water Management Fund will fund conservation incentives. As of June 30, 2015,~~ the minimum reserve requirement was ~~\$202~~205 million. The target reserve level at June 30, ~~2014~~2015 was ~~\$487~~482 million. At June 30, ~~2014~~2015, unrestricted reserves, which consist of the Water Rate Stabilization Fund and the Revenue Remainder Fund, totaled ~~\$487~~476 million on a modified accrual basis including ~~\$137~~188 million held in Metropolitan's financial reserves pursuant to the exchange contract between Metropolitan and SDCWA due to SDCWA's litigation challenging Metropolitan's rate structure. ~~—The amount held due to SDCWA's litigation challenging Metropolitan's rate structure as of March 31, 2015 was \$170 million.~~ See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority" and "METROPOLITAN REVENUES—Litigation Challenging Rate Structure" in this Appendix A. Unrestricted reserves in excess of the target reserve level may be used for any lawful purpose of Metropolitan as directed by the Board, provided that Metropolitan's fixed charge coverage ratio is at or above 1.2. Consistent with State legislation, Metropolitan will ensure that any funds in excess of target

reserve levels that are distributed to member agencies will be distributed in proportion to water sales revenues received from each member agency. In addition, Metropolitan maintains various restricted reserves, including reserves for risk retention, operations and maintenance expenses, State Water Contract payments, and other obligations and purposes.

On ~~April 8, 2014,~~ July 14, 2015, Metropolitan's Board approved ~~the use of unrestricted reserves, over the target reserve level, as follows: \$100~~\$264 million ~~deposit~~ to acquire various properties in Riverside and Imperial Counties, with \$160 million funded from the Replacement and Refurbishment Fund, ~~for pay as you go funding of the CIP; \$100 million deposited to the Other Post Employment Benefits (OPEB) Trust; and the remaining amount over target, \$232 million, was placed in a Water Management Fund and will cover costs associated with replenishing storage, purchasing transfers and funding drought response and water conservation programs.~~ from unrestricted reserves. On September 22, 2015, Metropolitan's Board approved \$44.4 million to pay SNWA to store 150,000 acre-feet of water with Metropolitan. This water will be available to Metropolitan during 2015. When SNWA requests the return of any of the stored water, SNWA will reimburse Metropolitan for an equivalent proportion of the \$44.4 million, based on the amount of water returned plus inflation. This amount will be funded from unrestricted reserves. See "—METROPOLITAN'S WATER SUPPLY—Interim Surplus Guidelines" in this Appendix A.

Wheeling and Exchange Charges

The process for the delivery of water not owned or controlled by Metropolitan is referred to as "wheeling." Under the current rate structure, wheeling parties pay the System Access Rate and Water Stewardship Rate, Treatment Surcharge (if applicable) and power costs for wheeling transactions. See "—Rate Structure" above. These payments are included in Net Operating Revenues. Wheeling and exchange revenues totaled ~~\$89.6 million during fiscal year 2011-12,~~ \$74.6 million ~~in~~ during fiscal year 2012-13, ~~and~~ \$81.3 million during fiscal year 2013-~~14,~~ 14, and ~~\$78.8 million during fiscal year 2014-15.~~ See "—Litigation Challenging Rate Structure" above for a description of litigation by the SDCWA and IID challenging Metropolitan's System Access Rate and Water Stewardship Rate.

Hydroelectric Power Recovery Revenues

Metropolitan has constructed 16 small hydroelectric plants on its distribution system. The plants are located in Los Angeles, Orange, Riverside and San Diego Counties at existing pressure control structures and other locations. The combined generating capacity of these plants is approximately 131 megawatts. The total capital cost of these 16 facilities is approximately \$176.1 million. Since 2000, annual energy generation sales revenues have ranged between ~~\$14.6~~8.5 million and nearly \$29.6 million. Energy generation sales revenues were ~~\$24.5 million in fiscal year 2012-13 and \$~~14.6 million in fiscal year 2013-~~14,~~ 14 and ~~\$8.5 million in fiscal year 2014-15.~~

Principal Customers

All of Metropolitan's regular customers are member agencies. Total water sales to the member agencies accrued for the fiscal year ended June 30, ~~2014~~2015 were ~~2.04~~1.91 million acre-feet, generating ~~\$1.48~~1.38 billion in water sales revenues for such period. Metropolitan's ten largest water customers in the year ended June 30, ~~2014~~2015 are shown in the following table, on an accrual basis. On June 11, 2010, the SDCWA filed litigation challenging Metropolitan's rates. See "—Litigation Challenging Rate Structure" above.

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TEN LARGEST WATER CUSTOMERS
Year Ended June 30, ~~2014~~2015
Accrual Basis (Dollars ~~In~~in Millions)

<u>Agency</u>	<u>Water Sales Revenues⁽¹⁾</u>	<u>Percent of Total</u>	<u>Water Sales in Acre-Feet⁽¹⁾</u>	<u>Percent of Total</u>
San Diego County Water Authority	\$ — 328,719,613 <u>323.54</u>	22.1 <u>23.4</u> %	545,659 <u>54</u> <u>0.140</u>	26.7 <u>28.3</u> %
City of Los Angeles	307,294,389 <u>236.88</u>	20.7 <u>17.1</u>	441,871 <u>35</u> <u>5,368</u>	21.6 <u>18.7</u>
MWD of Orange County	185,454,744 <u>182.94</u>	12.5 <u>13.2</u>	231,941 <u>22</u> <u>8,482</u>	11.3 <u>12.0</u>
West Basin MWD	104,897,611 <u>102.22</u>	7.1 <u>7.4</u>	120,915 <u>11</u> <u>2,893</u>	5.9
Calleguas MWD	101,576,451 <u>87.86</u>	6.8 <u>6.4</u>	116,685 <u>97</u> <u>103</u>	5.7 <u>5.1</u>
Eastern MWD	80,499,907 <u>71.87</u>	5.4 <u>5.2</u>	101,622 <u>89</u> <u>737</u>	5.0 <u>4.7</u>
Western MWD	60,675,556 <u>55.63</u>	4.1 <u>4.0</u>	76,194 <u>68</u> <u>386</u>	3.7 <u>3.6</u>
Three Valleys MWD	55,639,136 <u>46.65</u>	3.7 <u>3.4</u>	71,072 <u>58</u> <u>053</u>	3.5 <u>3.0</u>
Inland Empire Utilities Agency <u>City of Long Beach</u>	40,225,028 <u>41.69</u>	2.7 <u>3.0</u>	67,833 <u>46</u> <u>045</u>	3.3 <u>2.4</u>
Central Basin MWD	29,387,772 <u>36.23</u>	2.0 <u>2.6</u>	33,951 <u>45</u> <u>360</u>	1.7 <u>2.4</u>
Total	\$- 1,294,370,207 <u>1,185.53</u>	87.2 <u>85.7</u> %	1,807,743 <u>1,641,567</u>	88.5 <u>86.2</u> %
Total Water Sales Revenues	\$	Total Acre-Feet	2,043,720	

Source: Metropolitan.

(1) Includes wheeling and exchange water sales, revenues and deliveries. See "METROPOLITAN REVENUES—Wheeling and Exchange Charges" in this Appendix A.

Preferential Rights

Section 135 of the Act gives each of Metropolitan's member agencies a preferential entitlement to purchase a portion of the water served by Metropolitan, based upon a ratio of all payments on tax assessments and otherwise, except purchases of water, made to Metropolitan by the member agency

compared to total payments made by all member agencies on tax assessments and otherwise since Metropolitan was formed, except purchases of water. Historically, these rights have not been used in allocating Metropolitan's water. The California Court of Appeal has upheld Metropolitan's methodology for calculation of the respective member agencies' preferential rights under Section 135 of the Act. SDCWA's litigation challenging Metropolitan's water rates also challenges Metropolitan's exclusion of payments for exchange water from the calculation of SDCWA's preferential right. See "—Litigation Challenging Rate Structure" above.

California Ballot Initiatives

Proposition 218, a State ballot initiative known as the "Right to Vote on Taxes Act," was approved by the voters on November 5, 1996 adding Articles XIII C and XIII D to the California Constitution. Article XIII D provides substantive and procedural requirements on the imposition, extension or increase of any "fee" or "charge" levied by a local government upon a parcel of real property or upon a person as an incident of property ownership. As a wholesaler, Metropolitan serves water to its member agencies, not to persons or properties as an incident of property ownership. Thus, water rates charged by Metropolitan to its member agencies are not property related fees and charges and therefore are exempt from the requirements of Article XIII D. Fees for water service by Metropolitan's member agencies or their agencies providing retail water service are subject to the requirements of Article XIII D.

Article XIII D also imposes certain procedures with respect to assessments. Under Article XIII D, "standby charges" are considered "assessments" and must follow the procedures required for "assessments." Metropolitan has imposed water standby charges since 1992. Any change to Metropolitan's current standby charges could require notice to property owners and approval by a majority of such owners returning mail-in ballots approving or rejecting any imposition or increase of such standby charge. Twenty-two member agencies have elected to collect all or a portion of their readiness-to-serve charges through standby charges. See "—Additional Revenue Components—*Readiness-to-Serve Charge*" and "—*Water Standby Charges*" above. Even if Article XIII D is construed to limit the ability of Metropolitan and its member agencies to impose or collect standby charges, the member agencies will continue to be obligated to pay the readiness-to-serve charges.

Article XIII C extends the people's initiative power to reduce or repeal previously authorized local taxes, assessments fees and charges. This extension of the initiative power is not limited by the terms of Article XIII C to fees imposed after November 6, 1996 or to property-related fees and charges and absent other authority could result in retroactive reduction in existing taxes, assessments or fees and charges.

Proposition 26, a State ballot initiative aimed at restricting regulatory fees and charges, was approved by the California voters on November 2, 2010. Proposition 26 broadens the definition of "tax" in Article XIII C of the California Constitution to include levies, charges and exactions imposed by local governments, except for charges imposed for benefits or privileges or for services or products granted to the payor (and not provided to those not charged) that do not exceed their reasonable cost; regulatory fees that do not exceed the cost of regulation; fees for the use of local governmental property; fines and penalties imposed for violations of law; real property development fees; and assessments and property-related fees imposed under Article XIII D of the California Constitution. Taxes imposed by a special district such as Metropolitan are subject to approval by two-thirds of the voters voting on the ballot measure for authorization. Proposition 26 applies to charges imposed or increased by local governments after the date of its approval. Metropolitan believes its water rates and charges are not taxes under Proposition 26. ~~Nevertheless, Metropolitan is assessing whether Proposition 26 may affect future water rates and charges.~~ SDCWA's lawsuit challenging the rates adopted by Metropolitan in April 2012, part of which became effective January 1, 2013 and part of which became effective January 1, 2014, alleged that such rates violate Proposition 26. (See "—Litigation Challenging Rate Structure" above.)

Propositions 218 and 26 were adopted as measures that qualified for the ballot pursuant to the State's initiative process. From time to time, other initiative measures could be adopted or legislative measures could be approved by the Legislature, which may place limitations on the ability of Metropolitan or its member agencies to increase revenues or to increase appropriations. Such measures may further affect Metropolitan's ability to collect taxes, assessments or fees and charges, which could have an effect on Metropolitan's revenues.

Investment of Moneys in Funds and Accounts

All moneys in any of the funds and accounts established pursuant to Metropolitan's water revenue or general obligation bond resolutions are invested by the Treasurer in accordance with Metropolitan's Statement of Investment Policy. All Metropolitan funds available for investment are currently invested in United States Treasury and agency securities, commercial paper, negotiable certificates of deposit, banker's acceptances, corporate notes, municipal bonds, asset-backed, mortgage-backed securities and the California Local Agency Investment Fund ("LAIF"). The LAIF is a voluntary program created by statute as an investment alternative for California's local governments and special districts. LAIF permits such local agencies to participate in an investment portfolio, which invests billions of dollars, using the investment expertise of the State Treasurer's Office.

The Statement of Investment Policy provides that in managing Metropolitan's investments, the primary objective shall be to safeguard the principal of the invested funds. The secondary objective shall be to meet all liquidity requirements and the third objective shall be to achieve a return on the invested funds. Although the Statement of Investment Policy permits investments in some asset-backed securities, the portfolio does not include any of the special investment vehicles related to sub-prime mortgages. The Statement of Investment Policy allows Metropolitan to exceed the portfolio and single issuer limits for purchases of California local agency securities when purchasing Metropolitan tendered bonds in conjunction with its self-liquidity program. See "METROPOLITAN EXPENDITURES—Variable Rate and Swap Obligations" in this Appendix A. Metropolitan's current investments comply with the Statement of Investment Policy.

As of ~~April 30,~~August 31, 2015, the total market value (cash-basis) of all Metropolitan funds was ~~\$1.481.02~~ billion, including bond reserves of ~~\$84.174.9~~ million. The market value of Metropolitan's investment portfolio is subject to market fluctuation and volatility and general economic conditions. In fiscal year ~~2013-14,~~2014-15, Metropolitan's earnings on investments, including adjustments for gains and losses and premiums and discounts, including construction account and trust fund earnings, on a cash basis (unaudited) were \$21.4 million. In fiscal year 2013-14, Metropolitan's earnings on investments, on a cash basis (unaudited) were \$15.7 million. In fiscal year 2012-13, Metropolitan's earnings on investments, on a cash basis (unaudited) were \$9.4 million. In fiscal year 2011-12, Metropolitan's earnings on investments, on a cash basis (unaudited) were \$13.9 million. Over the three years ended ~~April 30,~~August 31, 2015, the market value of the month-end balance of Metropolitan's investment portfolio (excluding bond reserve funds) averaged approximately ~~\$1.161.195~~ billion. The minimum month-end balance of Metropolitan's investment portfolio (excluding bond reserve funds) during such period was approximately ~~\$829.5914.4~~ million on ~~July 31,~~October 12, 2012. See Footnote 3 to Metropolitan's audited financial statements in Appendix B for additional information on the investment portfolio.

Metropolitan's regulations require that (1) the Treasurer provide an annual Statement of Investment Policy for approval by Metropolitan's Board, (2) the Treasurer provide a monthly investment report to the Board and the General Manager showing by fund the description, maturity date, yield, par, cost and current market value of each security, and (3) the General Counsel review as to eligibility the securities invested in by the Treasurer for that month and report his or her determinations to the Board. The Board approved the Statement of Investment Policy for fiscal year ~~2014~~2015-1516 on June ~~10,~~20149, 2015.

Subject to the provisions of Metropolitan's water revenue or general obligation bond resolutions, obligations purchased by the investment of bond proceeds in the various funds and accounts established pursuant to a bond resolution are deemed at all times to be a part of such funds and accounts and any income realized from investment of amounts on deposit in any fund or account therein will be credited to such fund or account. The Treasurer is required to sell or present for redemption any investments whenever it may be necessary to do so in order to provide moneys to meet required payments or transfers from such funds and accounts. For the purpose of determining at any given time the balance in any such funds, any such investments constituting a part of such funds and accounts will be valued at the then estimated or appraised market value of such investments.

All investments, including those authorized by law from time to time for investments by public agencies, contain certain risks. Such risks include, but are not limited to, a lower rate of return than expected and loss or delayed receipt of principal. The occurrence of these events with respect to amounts held under Metropolitan's water revenue or general obligation revenue bond resolutions, or other amounts held by Metropolitan, could have a material adverse effect on Metropolitan's finances. These risks may be mitigated, but are not eliminated, by limitations imposed on the portfolio management process by Metropolitan's Statement of Investment Policy.

The Statement of Investment Policy requires that investments have a minimum credit rating of "A1/P1/F1" for short-term securities and "A" for longer-term securities at the time of purchase. If immediate liquidation of a security downgraded below these levels is not in the best interests of Metropolitan, the Treasurer or investment manager, in consultation with an ad hoc committee made up of the Chairman of the Board, the Chairman of the Finance and Insurance Committee and the General Manager, and with the concurrence of the General Counsel, may dispose of the security in an orderly and prudent manner considering the circumstances, under terms and conditions approved by a majority of the members of such ad hoc committee. The Treasurer is required to include a description of any securities that have been downgraded below investment grade and the status of their disposition in the Treasurer's monthly report.

The Statement of Investment Policy also limits the amount of securities that can be purchased by category, as well as by issuer, and prohibits investments that can result in zero interest income. Metropolitan's securities are settled on a delivery versus payment basis and are held by an independent third-party custodian. See Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT ~~FOR FISCAL YEAR ENDED JUNE 30, 2014~~ AND BASIC FINANCIAL STATEMENTS FOR ~~THE NINE MONTHS~~ FISCAL YEARS ENDED ~~MARCH 31, JUNE 30, 2015~~ and AND JUNE 30, 2014 ~~(UNAUDITED)~~" for a description of Metropolitan's investments at June 30, ~~2014-2015~~.

Metropolitan retains two outside investment firms to manage the long-term portion of Metropolitan's portfolio. The outside managers are required to adhere to Metropolitan's Statement of Investment Policy. As of ~~April 30, August 31, 2015~~, such managers were managing approximately ~~\$337.0~~ 338.5 million in investments on behalf of Metropolitan. Metropolitan's Statement of Investment Policy may be changed at any time by the Board (subject to State law provisions relating to authorized investments). There can be no assurance that the State law and/or the Statement of Investment Policy will not be amended in the future to allow for investments that are currently not permitted under State law or the Statement of Investment Policy, or that the objectives of Metropolitan with respect to investments or its investment holdings at any point in time will not change.

METROPOLITAN EXPENDITURES

General

The following table sets forth a summary of Metropolitan's expenditures, by major function, for the five years ended June 30, ~~2014, 2015~~. The table provides cash basis information, which is unaudited.

Expenses of Metropolitan for the fiscal years ended June 30, 2014 and June 30, ~~2013, 2015~~, on an accrual basis, are shown in Appendix B - “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT ~~FOR FISCAL YEAR ENDED JUNE 30, 2014~~ AND BASIC FINANCIAL STATEMENTS FOR ~~THE NINE MONTHS FISCAL YEAR ENDED MARCH 31, JUNE 30, 2015 and 2014 (UNAUDITED) AND JUNE 30, 2014.~~”

SUMMARY OF EXPENDITURES
Fiscal Years Ended June 30
(Dollars in Millions)

	2010	2011	2012	2013	2014	2015
Operation and Maintenance Costs ⁽¹⁾	\$ 441.6	\$ 430.8	\$ 425.3	\$ 413.6	\$ 561.1	<u>\$ 640.6</u>
Total State Water Project and Water Transfers ⁽²⁾	560.1	593.4	535.4	531.1	472.0	<u>519.7</u>
Total Debt Service ⁽³⁾	287.0	306.7	323.0	326.9	372.0	<u>291.0</u>
Construction Disbursements from Revenues ⁽³⁴⁾	35.1	45.0	44.2	54.7	89.0	<u>210.2</u>
Other ⁽⁴⁵⁾	5.3	2.4	2.8	6.2	6.0	<u>5.7</u>
Total Disbursements (net of reimbursements) ⁽⁵⁶⁾	\$1,329.1	\$1,378.3	\$1,330.7	\$1,332.5	\$1,501.1	<u>\$1,667.2</u>

Source: Metropolitan.

- (1) Includes inventories, undistributed payroll, local resource programs, conservation programs and CRA power. See the table headed “Summary of Receipts by Source” under “METROPOLITAN REVENUES” in this Appendix A. For fiscal year 2015, includes \$48.9 million of conservation projects funded from transfers from the Water Management Fund. See “METROPOLITAN’S REVENUES— Summary of Receipts by Source” in this Appendix A.
- (2) Includes both operating and capital expense portions. See “METROPOLITAN’S WATER SUPPLY—Water Transfer, Storage and Exchange Programs” and “POWER SOURCES AND COSTS” in this Appendix A. For fiscal year 2015, includes \$29.3 million of water purchases funded from transfers from the Water Management Fund. See “METROPOLITAN’S REVENUES— Summary of Receipts by Source”, in this Appendix A.
- (3) Net of Build America Bond reimbursement of \$10.4 million, \$13.3 million, \$12.7 million, \$12.3 million, and \$12.3 million, in fiscal years 2011 thru 2015, respectively. See “METROPOLITAN EXPENDITURES—“Build America Bonds”.
- (4) At the discretion of the Board, in any given year, Metropolitan may increase or decrease funding available for construction disbursements to be paid from revenues. Does not include expenditures of bond proceeds.
- (45) Includes operating equipment and arbitrage rebate.
- (56) Disbursements exceeded revenues in the fiscal ~~years~~ year ended June 30, ~~2010 and~~ 2011. See “METROPOLITAN REVENUES—Financial Reserve Policy” in this Appendix A.

Revenue Bond Indebtedness

The water revenue bonds, outstanding as of ~~June~~October 1, 2015, are set forth below:

<u>Name of Issue</u>	<u>Principal Outstanding</u>
Water Revenue Refunding Bonds, 1993 Series A	\$ 101,840,000 <u>86,540,000</u>
Water Revenue Bonds, 2000 Authorization, Series B-3 ⁽¹⁾	88,800,000
Water Revenue Bonds, 2000 Authorization, Series B-4(1)*	88,800,000
Water Revenue Bonds, 2005 Authorization, Series A*	75,620,000
Water Revenue Bonds, 2005 Authorization, Series C	175,000,000
Water Revenue Refunding Bonds, 2006 Series B	24,055,000
Water Revenue Bonds, 2006 Authorization, Series A	391,355,000 <u>389,235,000</u>
Water Revenue Refunding Bonds, 2008 Series A-2 ⁽¹⁾	62,465,000
Water Revenue Refunding Bonds, 2008 Series B	127,200,000 <u>126,980,000</u>
Water Revenue Refunding Bonds, 2008 Series C	41,800,000 <u>34,700,000</u>
Water Revenue Bonds, 2008 Authorization, Series A	183,525,000
Water Revenue Refunding Bonds, 2009 Series A-2 ⁽¹⁾	104,180,000
Water Revenue Refunding Bonds, 2009 Series B	106,690,000
Water Revenue Refunding Bonds, 2009 Series C	91,165,000
Water Revenue Bonds, 2008 Authorization, Series B	15,035,000 <u>12,735,000</u>
Water Revenue Bonds, 2008 Authorization, Series C ⁽²⁾	78,385,000
Water Revenue Bonds, 2008 Authorization, Series D ⁽²⁾	250,000,000
Water Revenue Refunding Bonds, 2009 Series D	64,740,000 <u>58,860,000</u>
Water Revenue Refunding Bonds, 2009 Series E	18,355,000 <u>15,590,000</u>
Water Revenue Bonds, 2010 Authorization, Series A ⁽²⁾	250,000,000
Water Revenue Refunding Bonds, 2010 Series B	84,175,000 <u>79,330,000</u>
Water Revenue Refunding Bonds, 2011 Series A1-A4 ⁽¹⁾	228,875,000
Water Revenue Refunding Bonds, 2011 Series B	73,230,000 <u>35,760,000</u>
Water Revenue Refunding Bonds, 2011 Series C	156,100,000 <u>147,935,000</u>
Water Revenue Refunding Bonds, 2012 Series A	<u>35,000</u>
Water Revenue Refunding Bonds, 2012 Series B-1 and B-2 ⁽¹⁾	181,180,000
Water Revenue Refunding Bonds, 2012 Series C	98,585,000
Water Revenue Refunding Bonds, 2012 Series D	190,600,000
Water Revenue Refunding Bonds, 2012 Series E2*	19,605,000 <u>605,000</u>
Water Revenue Refunding Bonds, 2012 Series E3	<u>0</u>
Water Revenue Refunding Bonds, 2012 Series E3	29,820,000
Water Revenue Refunding Bonds, 2012 Series E3	31,220,000
Water Revenue Refunding Bonds, 2012 Series F	60,035,000
Water Revenue Refunding Bonds, 2012 Series G	<u>59,335,000</u>
Special Variable Rate Water Revenue Refunding Bonds, 2013 Series D ⁽¹⁾	111,890,000
Special Variable Rate Water Revenue Refunding Bonds, 2013 Series E ⁽¹⁾	87,445,000
Water Revenue Refunding Bonds, 2014 Series A	104,820,000
Water Revenue Refunding Bonds, 2014 Series B	95,935,000
Water Revenue Refunding Bonds, 2014 Series C1-C3	10,575,000
Special Variable Rate Water Revenue Refunding Bonds, 2014 Series D ⁽¹⁾	30,335,000
Water Revenue Refunding Bonds, 2014 Series E	79,770,000
Water Revenue Refunding Bonds, 2014 Series G1-G5	<u>63,575,000</u>
	86,060,000
	57,840,000
<u>Special Variable Rate Water Revenue Refunding Bonds, 2015 Series A1 and A2⁽¹⁾</u>	<u>188,900,000</u>
Total	\$4,157,105,000<u>4,029,705,000</u>

Source: Metropolitan.

- (1) Outstanding variable rate obligation.
 - (2) Designated as “Build America Bonds” pursuant to the American Recovery and Reinvestment Act of 2009.
- * ~~Expected to be refunded from the proceeds of the Special Variable Rate Water Revenue Refunding Bonds, 2015 Series A~~

Limitations on Additional Revenue Bonds

Resolution 8329, adopted by Metropolitan's Board on July 9, 1991, as amended and supplemented (collectively with all such supplemental resolutions, the “Revenue Bond Resolutions”), provides for the issuance of Metropolitan's water revenue bonds. The Revenue Bond Resolutions establish limitations on the issuance of additional obligations payable from Net Operating Revenues. Under the Revenue Bond Resolutions, no additional bonds, notes or other evidences of indebtedness payable out of Operating Revenues may be issued having any priority in payment of principal, redemption premium, if any, or interest over any water revenue bonds authorized by the Revenue Bond Resolutions (“Parity Bonds”) or other obligations of Metropolitan having a lien and charge upon, or being payable from, the Net Operating Revenues on parity with such water revenue bonds (“Parity Obligations”). No additional Parity Bonds or Parity Obligations may be issued or incurred unless the conditions of the Revenue Bond Resolutions have been satisfied.

The laws governing Metropolitan's ability to issue water revenue bonds currently provide two additional limitations on indebtedness that may be incurred by Metropolitan. The Act provides for a limit on general obligation bonds, water revenue bonds and other evidences of indebtedness at 15 percent of the assessed value of all taxable property within Metropolitan’s service area. As of ~~June~~October 1, 2015, outstanding general obligation bonds, water revenue bonds and other evidences of indebtedness in the amount of ~~\$4.30~~4.15 billion represented approximately ~~0.19~~0.17 percent of the fiscal year ~~2014-15~~2015-16 taxable assessed valuation of ~~\$2,315~~2,451 billion. The second limitation under the Act specifies that no revenue bonds may be issued, except for the purpose of refunding, unless the amount of net assets of Metropolitan as shown on its balance sheet as of the end of the last fiscal year prior to the issuance of such bonds, equals at least 100 percent of the aggregate amount of revenue bonds outstanding following the issuance of such bonds. The net assets of Metropolitan at June 30, ~~2014~~2015 were \$7.20 billion. The aggregate amount of revenue bonds outstanding as of June 1, 2015 was ~~\$4.16~~4.03 billion. The limitation does not apply to other forms of financing available to Metropolitan. Audited financial statements including the net assets of Metropolitan as of June 30, ~~2014~~2015 and June 30, ~~2013, 2014~~, respectively, are shown in Appendix B – “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT ~~FOR FISCAL YEAR ENDED JUNE 30, 2014~~ AND BASIC FINANCIAL STATEMENTS FOR ~~THE NINE MONTHS~~FISCAL YEARS ENDED ~~MARCH 31, JUNE 30, 2015 and 2014 (UNAUDITED)~~ AND JUNE 30, 2014.”

Metropolitan provides no assurance that the Act’s limitations on indebtedness will not be revised or removed by future legislation. Limitations under the Revenue Bond Resolutions respecting the issuance of additional obligations payable from Net Operating Revenues on a parity with water revenue bonds of Metropolitan will remain in effect so long as any water revenue bonds authorized pursuant to the Revenue Bond Resolutions are outstanding, provided however, that the Revenue Bond Resolutions are subject to amendment and supplement in accordance with their terms.

Variable Rate and Swap Obligations

As of ~~June~~October 1, 2015, Metropolitan had outstanding ~~\$943.7 million~~1.03 billion of variable rate obligations, including bonds bearing interest in the Index Mode or Flexible Index Mode (the “Index Tender Bonds”), special variable rate bonds initially designated as self-liquidity bonds (the “Self-Liquidity Bonds”), and variable rate demand obligations supported by standby bond purchase agreements between Metropolitan and various liquidity providers (“Liquidity Supported Bonds”).

Index Tender Bonds. The Index Tender Bonds have substantially similar terms and conditions; however, the unscheduled mandatory tender dates and related tender periods for the Index Tender Bonds may differ. The Index Tender Bonds bear interest at a rate that fluctuates weekly based on the SIFMA Municipal Swap Index published weekly by Municipal Market Data. The Index Tender Bonds outstanding as of ~~May~~[October](#) 1, 2015, are summarized in the following table:

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<u>Series</u>	<u>Date of Issuance</u>	<u>Original Principal Amount Issued</u>	<u>Next Scheduled Mandatory Tender Date</u>	<u>Maturity Date</u>
2009 A-2	May 20, 2009	\$104,180,000	January 11, 2016 ⁽¹⁾	July 1, 2030
2011 A-1	June 2, 2011	64,440,000	January 4, 2016 ⁽²⁾	July 1, 2036
2011 A-2	June 2, 2011	50,000,000	March 27, 2018	July 1, 2036
2011 A-3	June 2, 2011	64,435,000	January 4, 2016 ⁽²⁾	July 1, 2036
2011 A-4	June 2, 2011	50,000,000	March 27, 2018	July 1, 2036
2012 B-1	April 27, 2012	49,295,000	March 27, 2018	July 1, 2027
2012 B-2	April 27, 2012	49,290,000	March 27, 2018	July 1, 2027
2013 E ⁽⁺³⁾	July 2, 2013	<u>104,820,000</u>	January 29, 2016	July 1, 2030
Total		\$536,460,000		

Source: Metropolitan.

(1) [It is anticipated that in early November 2015, the Series 2011 A-1 and A-3 bonds will be remarketed with a new Scheduled Mandatory Tender Date of December 5, 2016.](#)

(2) [It is anticipated that in early December 2015, the Series 2009 A-1 bonds will be remarketed with a new Scheduled Mandatory Tender Date of December 5, 2016.](#)

(3) (+) Flexible Index Mode Bonds. The terms and conditions of Flexible Index Mode Bonds are substantially similar to Index Mode Bonds except that each tender period may not exceed 270 days.

The Index Tender Bonds are subject to mandatory tender under certain circumstances. Metropolitan anticipates that it will pay the purchase price of tendered Index Tender Bonds from the proceeds of remarketing such Index Tender Bonds or from other available funds. Metropolitan's obligation to pay the purchase price of such Index Tender Bonds is an unsecured obligation of Metropolitan that it would pay from Net Operating Revenues only after it has made payments and deposits with respect to its Operating Revenues, the Parity Bonds, Parity Obligations and other obligations secured by Net Operating Revenues. Metropolitan has not secured any liquidity facility or letter of credit to support the payment of the purchase price of Index Tender Bonds in connection with a scheduled mandatory tender. If the purchase price of the Index Tender Bonds of any Series is not paid from the proceeds of remarketing or other funds following a scheduled mandatory tender, such Index Tender Bonds then will bear interest at a default rate of up to 12 percent per annum until purchased by Metropolitan or redeemed. Failure to pay the purchase price of a series of Index Tender Bonds on a scheduled mandatory tender date is a default under the related paying agent agreement, upon the occurrence and continuance of which a majority in aggregate principal amount of the owners of such series of Index Tender Bonds may elect a bondholders' committee to exercise rights and powers of such owners under such paying agent agreement. Failure to pay the purchase price of a series of Index Tender Bonds on a scheduled mandatory tender date is not a default under the Master Resolution. If the purchase price of the Index Tender Bonds of any series is not paid on a scheduled mandatory tender date, such Index Tender Bonds will also be subject to special mandatory redemption, in part, 18, 36 and 54 months following the purchase default. Any such special mandatory redemption payment will constitute a Bond Obligation payable on parity with the Parity Bonds and the Parity Obligations.

Self-Liquidity Bonds. As of ~~June~~[October](#) 1, 2015, Metropolitan had ~~\$167.2~~[\\$339.9](#) million of outstanding self-liquidity bonds, comprised of \$87.4 million Special Variable Rate Water Revenue Refunding Bonds, 2013 Series D, ~~and \$79.8~~[\\$63.6](#) million Special Variable Rate Water Revenue Refunding Bonds, 2014 Series D, ~~and \$188.9 million~~ [Special Variable Rate Water Revenue Refunding Bonds, 2015 Series A1 and A2.](#) The Self-Liquidity Bonds are subject to optional tender upon seven days' notice by the owners thereof and mandatory tender upon specified events. Metropolitan is irrevocably committed to purchase all Self-Liquidity Bonds tendered pursuant to any optional or mandatory tender to the extent that

remarketing proceeds are insufficient therefor and no standby bond purchase agreement or other liquidity facility is in effect. Metropolitan’s obligation to pay the purchase price of any tendered Self-Liquidity Bonds is an unsecured, special limited obligation of Metropolitan payable from Net Operating Revenues. In addition, Metropolitan’s investment policy permits it to purchase tendered Self-Liquidity Bonds as an investment for its investment portfolio (other than amounts in its investment portfolio consisting of bond reserve funds). Thus, while Metropolitan is only obligated to purchase tendered Self-Liquidity Bonds from Net Operating Revenues, it may use the cash and investments in its investment portfolio (other than amounts in its investment portfolio consisting of bond reserve funds and amounts posted as collateral with interest rate swap counterparties as described below) to purchase tendered Self-Liquidity Bonds. Metropolitan has not secured any liquidity facility or letter of credit to pay the purchase price of any tendered Self-Liquidity Bonds; however, Metropolitan has entered into a Revolving Credit Agreement (as described below) pursuant to which it may make borrowings for the purpose of paying the purchase price of Self-Liquidity Bonds. See “—Revolving Credit Agreement” below. Failure to pay the purchase price of Self-Liquidity Bonds upon optional or mandatory tender is not a default under the related paying agent agreement or a default under the Master Resolution. ~~The 2015 Series A, Special Variable Rate Water Revenue Refunding Bonds, will be Self-Liquidity Bonds.~~

Liquidity Supported Bonds. The interest rates for Metropolitan’s other variable rate demand obligations, totaling \$~~240.1~~151.3 million as of ~~June~~October 1, 2015, are reset on a daily or weekly basis. Such variable rate demand obligations are supported by Standby Bond Purchase Agreements between Metropolitan and various liquidity providers that provide for purchase of variable rate bonds by the applicable liquidity provider upon tender of such variable rate bonds and a failed remarketing. A decline in the creditworthiness of a liquidity provider will likely result in an increase in the interest rate of the applicable variable rate bonds, as well as an increase in the risk of a failed remarketing of such tendered variable rate bonds. Variable rate bonds purchased by a liquidity provider bear interest at a significantly higher interest rate and Metropolitan’s obligation to reimburse the liquidity provider may convert the term of the variable rate bonds purchased by the liquidity provider into a term loan amortizable over a period of up to three years, depending on the applicable liquidity facility.

The following table lists the liquidity providers, the expiration date of each facility and the principal amount of outstanding variable rate demand obligations covered under each facility as of ~~June~~October 1, 2015.

<u>Liquidity Provider</u>	<u>Bond Issue</u>	<u>Principal Outstanding</u>	<u>Facility Expiration</u>
Wells Fargo Bank, N.A.	2000 Authorization Series B-3	\$ 88,800,000	February 2017
	2000 Authorization Series B-4	-88,800,000	February 2017*
	Total	\$177,600,000	
Barclays Bank PLC	2008 Series A-2	<u>\$62,465,000</u>	September 2016
Total		\$240,065,000<u>151.</u>	

Source: Metropolitan.

~~* The 2000 Authorization Series B-4 bonds are expected to be refunded from the proceeds of the Special Variable Rate Water Revenue Refunding Bonds, 2015 Series A~~

Variable Rate Exposure Policy. ~~Included in~~ As of October 1, 2015, of Metropolitan's ~~\$943.7 million~~ 1.03 billion of variable rate obligations ~~are~~ \$493.6 million of variable rate demand obligations which, ~~by virtue of interest rate swap agreements,~~ are treated by Metropolitan as fixed rate debt, ~~by virtue of interest rate swap agreements,~~ for the purpose of calculating debt service requirements, ~~the variable payments that Metropolitan receives from swap counterparties approximate the payments that Metropolitan makes on associated variable rate debt.~~ The remaining ~~\$450~~ 534 million of variable rate obligations represent approximately ~~10.8~~ 13.3 percent of total outstanding water revenue bonds, as of ~~June~~ October 1, 2015.

Metropolitan's variable rate exposure policy requires that variable rate debt be managed to limit net interest cost increases within a fiscal year as a result of interest rate changes to no more than \$5 million. In addition, the maximum amount of variable interest rate exposure (excluding variable rate bonds associated with interest rate swap agreements) is limited to 40 percent of total outstanding water revenue bond debt. Variable rate debt capacity will be reevaluated as interest rates change and managed within these parameters.

Interest Rate Swap Transactions. By resolution adopted on September 11, 2001, Metropolitan's Board authorized the execution of interest rate swap transactions and related agreements in accordance with a master swap policy, which was subsequently amended by resolutions adopted on July 14, 2009 and May 11, 2010. Metropolitan may execute interest rate swaps if the transaction can be expected to reduce exposure to changes in interest rates on a particular financial transaction or in the management of interest rate risk derived from Metropolitan's overall asset/liability balance, result in a lower net cost of borrowing or achieve a higher net rate of return on investments made in connection with or incidental to the issuance, incurring or carrying of Metropolitan's obligations or investments, or manage variable interest rate exposure consistent with prudent debt practices and Board-approved guidelines. The Chief Financial Officer reports to the Finance and Insurance Committee of Metropolitan's Board each quarter on outstanding swap transactions, including notional amounts outstanding, counterparty exposures and termination values based on then-existing market conditions.

Metropolitan currently has one type of interest rate swap, referred to in the table below as "Fixed Payor Swaps." Under this type of swap, Metropolitan receives payments that are calculated by reference to a floating interest rate and makes payments that are calculated by reference to a fixed interest rate.

Net payments under the terms of the interest rate swap agreements are payable on a parity with the Parity Obligations. Termination payments under the 2002 A and 2002 B interest rate swap agreements would be payable on a parity with the Parity Obligations. All other termination payments related to interest rate swap agreements would be subordinate to the Parity Obligations.

The following swap transactions were outstanding as of ~~June~~ October 1, 2015:

FIXED PAYOR SWAPS:

<u>Designation</u>	<u>Notional Amount Outstanding</u>	<u>Swap Counterparty</u>	<u>Fixed Payor Rate</u>	<u>MWD Receives</u>	<u>Maturity Date</u>
2002 A	\$75,838,400	Morgan Stanley Capital Services, Inc.	3.300	57.74% of one-month LIBOR	7/1/2025
2002 B	28,371,600	JPMorgan Chase Bank	3.300	57.74% of one-month LIBOR	7/1/2025
2003 ⁽¹⁾	158,597,500	Deutsche Wells Fargo Bank AG	3.257	61.20% of one-month LIBOR	7/1/2030
2003	158,597,500	JPMorgan Chase Bank	3.257	61.20% of one-month LIBOR	7/1/2030
2004 C	7,760,500	Morgan Stanley Capital Services, Inc.	2.980	61.55% of one-month LIBOR	10/1/2029
2004 C	6,349,500	Citigroup Financial Products, Inc.	2.980	61.55% of one-month LIBOR	10/1/2029
2005	29,057,500	JPMorgan Chase Bank	3.360	70% of 3-month LIBOR	7/1/2030
2005	<u>29,057,500</u>	Citigroup Financial Products, Inc.	3.360	70% of 3-month LIBOR	7/1/2030
Total	\$493,630,000				

Source: Metropolitan.

(1) The obligations under this interest rate swap agreement were assigned by ~~UBS AG to~~ Deutsche Bank AG, New York Branch, to Wells Fargo Bank, pursuant to novation transactions dated July ~~22, 2010~~ 1, 2015.

These interest rate swap agreements entail risk to Metropolitan. The counterparty may fail or be unable to perform, interest rates may vary from assumptions, Metropolitan may be required to post collateral in favor of its counterparties and Metropolitan may be required to make significant payments in the event of an early termination of an interest rate swap. Metropolitan believes that if such an event were to occur, it would not have a material adverse impact on its financial position. Metropolitan seeks to manage counterparty risk by diversifying its swap counterparties, limiting exposure to any one counterparty, requiring collateralization or other credit enhancement to secure swap payment obligations, and by requiring minimum credit rating levels. Initially swap counterparties must be rated at least “Aa3” or “AA-”, or equivalent by any two of the nationally recognized credit rating agencies; or use a “AAA” subsidiary as rated by at least one nationally recognized credit rating agency. Should the credit rating of an existing swap counterparty drop below the required levels, Metropolitan may enter into additional swaps if those swaps are “offsetting” and risk-reducing swaps. Each counterparty is initially required to have minimum capitalization of at least \$150 million. See Note 5(f) in Appendix B - ~~“THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR THE NINE MONTHS ENDED MARCH 31, 2014 and 2013 (UNAUDITED). FISCAL YEARS ENDED JUNE 30, 2015 AND JUNE 30, 2014.”~~

Early termination of an interest rate swap agreement could occur due to a default by either party or the occurrence of a termination event. As of ~~March 31,~~ June 30, 2015, Metropolitan would have been required to pay to its counterparties termination payments if some of its swaps were terminated on that date

and would have been entitled to receive termination payments from its counterparties if other swaps were terminated. Metropolitan's net exposure to its counterparties for all such termination payments on that date was approximately \$96.83 million. Metropolitan does not presently anticipate early termination of any of its interest rate swap agreements due to default by either party or the occurrence of a termination event. However, effective June 28, 2012, Metropolitan exercised optional early termination provisions to terminate all or a portion of certain interest rate swap agreements totaling a notional amount of \$322 million. Effective February 12, 2014, Metropolitan exercised optional early termination provisions to terminate a portion of certain interest rate swap agreements, totaling a notional amount of \$147 million. Effective July 29, 2014, Metropolitan optionally terminated portions of certain interest rate swap agreements totaling a notional amount of \$163 million.

Metropolitan is required to post collateral in favor of a counterparty to the extent that Metropolitan's total exposure for termination payments to that counterparty exceeds the threshold specified in the applicable swap agreement. Conversely, the counterparties are required to release collateral to Metropolitan or post collateral for the benefit of Metropolitan as market conditions become favorable to Metropolitan. As of ~~March 31, June 30,~~ 2015, Metropolitan had no collateral posted with any counterparty. The highest, month-end, amount of collateral posted was \$36.8 million, on June 30, 2012, which was based on an outstanding swap notional amount of \$1.4 billion. The amount of required collateral varies from time to time due primarily to interest rate movements and can change significantly over a short period of time. See "METROPOLITAN REVENUES—Financial Reserve Policy" in this Appendix A. In the future, Metropolitan may be required to post additional collateral, or may be entitled to a reduction or return of the required collateral amount. Collateral deposited by Metropolitan is held by the counterparties; a bankruptcy of any counterparty holding collateral posted by Metropolitan could adversely affect the return of the collateral to Metropolitan. Moreover, posting collateral limits Metropolitan's liquidity. If collateral requirements increase significantly, Metropolitan's liquidity may be materially adversely affected. See "METROPOLITAN REVENUES—Financial Reserve Policy."

Build America Bonds

Metropolitan previously issued and designated three series of Bonds in the aggregate principal amount of \$578,385,000 as "Build America Bonds" under the provisions of the American Recovery and Reinvestment Act of 2009 (the "Build America Bonds"). Except as they may be reduced by sequestration as described in the following paragraph, Metropolitan currently expects to receive cash subsidies from the United States Treasury equal to 35 percent of the interest payable on all such outstanding Build America Bonds (the "Interest Subsidy Payments"). The Interest Subsidy Payments in connection with the Build America Bonds do not constitute Operating Revenues under the Master Resolution. Such Interest Subsidy Payments will constitute Additional Revenues, which Metropolitan may take into consideration when establishing its rates and charges and will be available to Metropolitan to pay principal of and interest on Metropolitan's Bonds.

The Budget Control Act of 2011 (the "Budget Control Act") provided for increases in the federal debt limit and established procedures designed to reduce the federal budget deficit. The Budget Control Act provided that a failure to reduce the deficit would result in sequestration, which are automatic, generally across-the-board, spending reductions. These reductions began on March 1, 2013 pursuant to an executive order that reduced budgetary authority for expenditures subject to sequestration, including subsidies for Build America Bonds. Pursuant to this executive order, the approximately \$6.64 million ~~interest subsidy payment~~ Interest Subsidy Payment that Metropolitan received on July 1, 2013 was reduced by 8.7 percent, or \$578,000, to \$6.06 million. ~~Refund payments~~ Interest Subsidy Payments processed on or after October 1, 2014 and on or before September 30, 2015 are anticipated to be reduced by the federal fiscal year 2014-2015 sequestration rate of 7.3 percent, ~~or approximately \$964,000 of the \$13.2 million originally projected to be received over this period.~~ and by 6.8% for the federal fiscal year 2015-16. The sequestration reduction rate will be applied unless and until a law is enacted that cancels or otherwise impacts the sequester, at which time the sequestration reduction rate is subject to change. Metropolitan can offer no assurances as to future

subsidy payments and expects that once it receives less than any full 35 percent subsidy payment, the United States Treasury will not thereafter reimburse Metropolitan for payments not made.

Other Revenue Obligations

As of ~~June~~October 1, 2015, Metropolitan had outstanding \$~~61.031.2~~ million of 2012 Series E-Parity-3 Bonds ~~in two series~~, \$30.3 million of 2014 Series C-Parity Bonds in three series, and \$57.8 million of 2014 Series G in five series, bearing interest in a term mode (the “Term Mode Bonds”). The Term Mode Bonds initially bear interest at a fixed rate for a specified period from their date of issuance, after which there shall be determined a new interest mode for each series (which may be another term mode, a daily mode, a weekly mode, a short-term mode or an index mode) or the Term Mode Bonds may be converted to bear fixed interest rates through the maturity date thereof. The owners of the Term Mode Bonds of a series must tender for purchase, and Metropolitan must purchase, all of the Term Mode Bonds of such series on the specified scheduled mandatory tender date of each term period for such series. The scheduled mandatory tender ~~dates~~date for the ~~two series of the~~2012 Series E-3 Bonds ~~are October 1, 2015 and~~is October 1, 2016. For the three series of the 2014 Series C Bonds, the scheduled mandatory tender dates are October 1, 2019, October 1, 2020 and October 1, 2021. For the five series of the 2014 Series G Bonds, the scheduled mandatory tender dates are October 1, 2016, 2017, 2018, 2019, and 2020, respectively. Metropolitan may call the Term Mode Bonds on or after the Call Protection Date for each of the series of Term Mode ~~Bonds. Metropolitan plans to call the 2012 Series E-2 Bonds on their Call Protection Date, of July 1, 2015, and refund the Bonds with a portion of the proceeds of the 2015 Series A, Special Variable Rate Water Revenue Refunding~~ Bonds.

Metropolitan will pay the principal of, and interest on, the Term Mode Bonds on parity with its other Parity Bonds. Metropolitan anticipates that it will pay the purchase price of tendered Term Mode Bonds from the proceeds of remarketing such Term Mode Bonds or from other available funds. Metropolitan’s obligation to pay the purchase price of such Term Mode Bonds is an unsecured obligation of Metropolitan that it would pay from Net Operating Revenues only after it has made payments and deposits with respect to its Operating Revenues, the Bonds and Parity Obligations and other obligations secured by Net Operating Revenues. Metropolitan has not secured any liquidity facility or letter of credit to support the payment of the purchase price of Term Mode Bonds in connection with any scheduled mandatory tender. If the purchase price of the Term Mode Bonds of any series is not paid from the proceeds of remarketing or other funds following a scheduled mandatory tender, such Term Mode Bonds will then bear interest at a default rate of up to 12 percent per annum until purchased by Metropolitan or redeemed. If the purchase price of the Term Mode Bonds of any series is not paid on a scheduled mandatory tender date, such Term Mode Bonds will also be subject to special mandatory redemption, in part, 18, 36 and 54 months following the purchase default. Any such special mandatory redemption payment will constitute a Bond Obligation payable on parity with the Parity Bonds and the Parity Obligations.

Revolving Credit Agreement

On March 21, 2013, Metropolitan entered into a revolving credit agreement (“the BNY Mellon Revolving Credit Agreement”) with The Bank of New York Mellon (“BNY Mellon”). Under the terms and conditions of the Revolving Credit Agreement, Metropolitan may borrow up to \$96,545,900 for purposes of paying the purchase price of any Self-Liquidity Bonds. Under the BNY Mellon Revolving Credit Agreement, a failure by Metropolitan to perform or observe certain covenants could result in a termination of BNY Mellon’s commitment and entitle BNY Mellon to declare all amounts then outstanding to be immediately due and payable. Metropolitan has secured its obligation to pay principal and interest under the BNY Revolving Credit Agreement as a Parity Obligation under the Master Resolution. The scheduled expiration date of the BNY Mellon Revolving Credit Agreement is March 31, 2016.

Metropolitan executed a revolving credit agreement with Wells Fargo Bank, N.A., (the Wells Fargo Revolving Credit Agreement), on July 1, 2015. Under the terms and conditions of the Wells Fargo Revolving Credit Agreement, Metropolitan will be able to borrow up to \$180,000,000 for purposes of paying the purchase price of any Self-Liquidity Bonds. Under the Wells Fargo Revolving Credit Agreement, a

failure by Metropolitan to perform or observe certain covenants could result in a termination of Wells Fargo’s commitment and entitle Wells Fargo to declare all amounts then outstanding to be immediately due and payable. The scheduled expiration date of the Wells Fargo Revolving Credit Agreement is July 1, 2018.

Metropolitan has designated (or will designate) principal and interest under both the BNY Mellon Revolving Credit Agreement and the Wells Fargo Revolving Credit Agreement (together, the “Revolving Credit Agreements”) as Parity Obligations under the Master Resolution. Metropolitan has no obligation to make borrowings under ~~the Revolving Credit Agreement~~, maintain ~~the Revolving Credit Agreement~~, or renew the Revolving Credit ~~Agreement~~Agreements. See “—Limitations on Additional Revenue Bonds” above.

~~When Metropolitan entered into~~In the Revolving Credit ~~Agreement~~, ~~it~~Agreements, Metropolitan designated the principal and interest payable ~~under the Revolving Credit Agreement~~ as Excluded Principal Payments under the Master Resolution and thus, for purposes of calculating Maximum Annual Debt Service, included the amount of principal and interest due and payable under the Revolving Credit ~~Agreement~~Agreements on a schedule of Assumed Debt Service. This schedule of Assumed Debt Service assumes that Metropolitan will pay the principal under the Revolving Credit ~~Agreement~~Agreements over a period of 30 years at a fixed interest rate of 3.75 percent. Pursuant to the terms of the Master Resolution, while the Revolving Credit ~~Agreement is~~Agreements are in force and effect, when Metropolitan calculates its covenant relating to the creation or incurrence of additional indebtedness, it will add an amount to its Net Operating Revenues relating to an assumed annual debt service payment that Metropolitan would receive if it were to use the proceeds of the Revolving Credit ~~Agreement~~Agreements to purchase Self-Liquidity Bonds.

Subordinate Revenue Obligations

Metropolitan currently is authorized to issue subordinate debt of up to \$400,000,000 of Commercial Paper Notes payable from Net Operating Revenues on a basis subordinate to the Parity Bonds and the Parity Obligations. Although no Commercial Paper Notes are currently outstanding, the authorization remains in full force and effect and Metropolitan may issue Commercial Paper Notes from time to time. In addition, Metropolitan obtained a \$20 million California Safe Drinking Water Revolving Fund Loan in 2003 at an interest rate of 2.39 percent per annum to reimburse construction costs for oxidation retrofit facilities at the Henry J. Mills Treatment Plant in Riverside County. The loan payment obligation is subordinate to the Parity Bonds and Parity Obligations. As of ~~June~~October 1, 2015, the principal balance outstanding was ~~\$10.7~~10.2 million.

General Obligation Bonds

As of ~~June~~October 1, 2015, \$110,420,000 aggregate principal amount of general obligation bonds payable from *ad valorem* property taxes were outstanding. See “METROPOLITAN REVENUES — General” and “— Revenue Allocation Policy and Tax Revenues” in this Appendix A. Metropolitan’s revenue bonds are not payable from the levy of *ad valorem* property taxes.

<u>General Obligation Bonds</u>	<u>Amount Issued</u> ⁽¹⁾	<u>Principal Outstanding</u>
Waterworks General Obligation Refunding Bonds, 2009 Series A	\$45,515,000	\$33,485,000
Waterworks General Obligation Refunding Bonds, 2010 Series A	39,485,000	27,290,000
Waterworks General Obligation Refunding Bonds, 2014 Series A	<u>49,645,000</u>	<u>49,645,000</u>
Total	<u>\$134,645,000</u>	<u>\$110,420,000</u>

Source: Metropolitan.

- (1) Voters authorized Metropolitan to issue \$850,000,000 of Waterworks General Obligation Bonds, Election 1966, in multiple series, in a special election held on June 7, 1966. This authorization has been fully utilized. This table lists bonds that refunded such Waterworks General Obligation Bonds, Election 1966.

State Water Contract Obligations

General. On November 4, 1960, Metropolitan entered into its State Water Contract with DWR, under which Metropolitan receives an entitlement to water service from the State Water Project. Subsequently, other public agencies also entered into water supply contracts with DWR, all of which were patterned after Metropolitan's State Water Contract. Metropolitan's State Water Contract accounts for nearly one-half of the total entitlement for State Water Project water contracted for by all contractors.

The State Water Contract will remain in effect until 2035 or until all DWR bonds issued to finance construction of project facilities are repaid, whichever is longer. At the expiration of the State Water Contract, Metropolitan has the option to continue service under substantially the same terms and conditions. In June 2014, DWR and State Water Project Contractors reached an AIP to extend the contract to 2085 and to make certain changes related to the financial management of the State Water Project in the future. See "METROPOLITAN'S WATER SUPPLY—State Water Project" in this Appendix A. As of ~~March 31~~, October 1, 2015, the latest maturity of outstanding DWR bonds issued for such purpose was December 1, 2035.

Under the State Water Contract, Metropolitan is obligated to pay allocable portions of the cost of construction of the system and ongoing operating and maintenance costs through at least 2035, regardless of quantities of water available from the project. Other payments are based on deliveries requested and actual deliveries received, costs of power required for actual deliveries of water, and offsets for credits received. Metropolitan's payment obligation for the State Water Project for the fiscal year ended June 30, ~~2014~~2015 was \$~~464.6~~437 million, which amount reflects prior year's credits of \$~~79.5~~74.2 million. For the fiscal year ended June 30, ~~2014~~2015, Metropolitan's payment obligations under the State Water Contract were approximately 31 percent of Metropolitan's total annual expenditures. A portion of Metropolitan's annual property tax levy is for payment of State Water Contract obligations, as described above under "METROPOLITAN REVENUES—General" in this Appendix A. See Note 9(a) to Metropolitan's audited financial statements in Appendix B for an estimate of Metropolitan's payment obligations under the State Water Contract. Also see "POWER SOURCES AND COSTS" in this Appendix A for a description of current and future costs for electric power required to operate State Water Project pumping systems and a description of litigation involving the federal relicensing of the Hyatt-Thermalito hydroelectric generating facilities at Lake Oroville.

The State Water Contract requires that in the event that Metropolitan fails or is unable to raise sufficient funds by other means, Metropolitan must levy upon all property within its boundaries not exempt from taxation a tax or assessment sufficient to provide for all payments under the State Water Contract. Currently, a portion of the capital costs under the State Water Contract are paid from *ad valorem* taxes levied by Metropolitan. In the opinion of Metropolitan's General Counsel, a tax increase to provide for additional payments under the State Water Contract would be within the exemption permitted under Article XIII A of the State Constitution as a tax to pay pre-1978 voter approved indebtedness.

Metropolitan capitalizes its share of system construction costs as participation rights in State Water Project facilities as such costs are billed by DWR. Unamortized participation rights essentially represent a prepayment for future water deliveries through the State Water Project system. Metropolitan's share of system operating and maintenance costs are annually expensed.

Metropolitan has entered into amendments to the State Water Contract that represent additional long-term obligations, as described below.

Devil Canyon-Castaic Contract. On June 23, 1972, Metropolitan and five other southern California public agencies entered into a contract (the “Devil Canyon-Castaic Contract”) with DWR for the financing and construction of the Devil Canyon and Castaic power recovery facilities, located on the aqueduct system of the State Water Project. Under this contract, DWR agreed to build the Devil Canyon and Castaic facilities, using the proceeds of revenue bonds issued by DWR under the State Central Valley Project Act. DWR also agreed to use and apply the power made available by the construction and operation of such facilities to deliver water to Metropolitan and the other contracting agencies. Metropolitan, in turn, agreed to pay to DWR 88 percent of the debt service on the revenue bonds issued by DWR. For calendar year 2014, this represented a payment of \$6.7 million. In addition, Metropolitan agreed to pay 78.5 percent of the operation and maintenance expenses of the Devil Canyon facilities and 96 percent of the operation and maintenance expenses of the Castaic facilities. Metropolitan’s obligations under the Devil Canyon-Castaic Contract continue until the bonds are fully retired in 2022 even if DWR is unable to operate the facilities or deliver power from these facilities.

Off-Aqueduct Power Facilities. In addition to system “on-aqueduct” power facilities costs, DWR has, either on its own or by joint venture, financed certain off-aqueduct power facilities. The power generated is utilized by the system for water transportation and other State Water Project purposes. Power generated in excess of system needs is marketed to various utilities and the California power exchange market. Metropolitan is entitled to a proportionate share of the revenues resulting from sales of excess power. By virtue of a 1982 amendment to the State Water Contract and the other water supply contracts, Metropolitan and the other water contractors are responsible for paying the capital and operating costs of the off-aqueduct power facilities regardless of the amount of power generated. Other costs of Metropolitan in relation to the State Water Project and the State Water Contract may increase as a result of restructuring of California’s electric utility industry and new Federal Energy Regulatory Commission (“FERC”) regulations.

East Branch Enlargement Amendment. In 1986, Metropolitan’s State Water Contract and the water supply contracts of certain other State Water Project Contractors were amended for the purpose, among others, of financing the enlargement of the East Branch of the California Aqueduct. Under the amendment, enlargement of the East Branch can be initiated either at Metropolitan's request or by DWR finding that enlargement is needed to meet demands. Metropolitan, the other State Water Contractors on the East Branch, and DWR are currently in discussions on the timetable and plan for future East Branch enlargement actions.

The amendment establishes a separate subcategory of the Transportation Charge under the State Water Contract for the East Branch Enlargement and provides for the payment of costs associated with financing and operating the East Branch Enlargement. Under the amendment, the annual financing costs for such facilities financed by bonds issued by DWR are allocated among the participating contractors based upon the delivery capacity increase allocable to each participating contractor. Such costs include, but are not limited to, debt service, including coverage requirements, deposits to reserves, and certain operation and maintenance expenses, less any credits, interest earnings or other moneys received by DWR in connection with this facility.

If any participating contractor defaults on payment of its allocable charges under the amendment, among other things, the non-defaulting participating contractors may assume responsibility for such charges and receive delivery capability that would otherwise be available to the defaulting participating contractor in proportion to the non-defaulting contractor’s participation in the East Branch Enlargement. If participating contractors fail to cure the default, Metropolitan will, in exchange for the delivery capability that would otherwise be available to the defaulting participating contractor, assume responsibility for the capital charges of the defaulting participating contractor.

Water System Revenue Bond Amendment. In 1987, the State Water Contract and other water supply contracts were amended for the purpose of financing State Water Project facilities through revenue bonds. This amendment establishes a separate subcategory of the Delta Water Charge and the Transportation Charge for projects financed with DWR water system revenue bonds. This subcategory of charge provides the

revenues required to pay the annual financing costs of the bonds and consists of two elements. The first element is an annual charge for repayment of capital costs of certain revenue bond financed water system facilities under the existing water supply contract procedures. The second element is a water system revenue bond surcharge to pay the difference between the total annual charges under the first element and the annual financing costs, including coverage and reserves, of DWR’s water system revenue bonds.

If any contractor defaults on payment of its allocable charges under this amendment, DWR is required to allocate a portion of the default to each of the nondefaulting contractors, subject to certain limitations, including a provision that no nondefaulting contractor may be charged more than 125 percent of the amount of its annual payment in the absence of any such default. Under certain circumstances, the nondefaulting contractors would be entitled to receive an allocation of the water supply of the defaulting contractor.

The following table sets forth Metropolitan’s projected costs of State Water Project water, based upon DWR’s Annual Billing to Metropolitan for calendar year ~~2015~~2016 and projections based on Metropolitan’s adopted biennial budget for fiscal years ~~2014-15 and 2015-16. For fiscal year 2014-15, projections are based on actual financial results through March 2015 and revised projections for the balance of the fiscal year. If a Bay-Delta improvement alternative is identified and funding is approved, construction may commence in 2016.~~2013-14 and 2014-15. See “METROPOLITAN’S WATER SUPPLY—State Water Project—Bay-Delta Regulatory and Planning Activities” in this Appendix A.

**PROJECTED COSTS OF METROPOLITAN
FOR STATE WATER PROJECT WATER⁽¹⁾
(Dollars in Millions)**

Year Ending June 30	Capital Costs	Minimum OMP&R⁽²⁾	Power Costs⁽³⁾	Refunds & Credits	Total⁽⁴⁾
2015	\$157.9	\$214.1	\$136.5	\$(59.1)	\$449.4
2016	\$170.0	\$184.6	\$196.8	\$(36.3)	\$515.1
2017	183.6	190.1	212.6	(36.6)	549.7
2018	193.3	191.0	221.9	(36.4)	569.8
2019	206.6	192.6	235.2	(35.9)	598.4
<u>2020</u>	<u>245.8</u>	<u>194.1</u>	<u>257.5</u>	<u>(34.3)</u>	<u>663.1</u>

Source: Metropolitan.

- (1) Projections are based upon DWR’s Annual Billing to Metropolitan for ~~2015~~2016 and attachments (dated July 1, ~~2014~~2015) and Metropolitan’s adopted biennial budget for fiscal years 2014-15 and 2015-16. ~~The 2014-15 fiscal year reflects actual financial results through March 2015 and revised projections for the balance of the fiscal year.~~ All costs are adjusted from calendar year to fiscal year periods ending June 30. The total charges shown above differ from those shown in Note 9 of Metropolitan’s audited financial statements for the fiscal years ended June 30, ~~2014~~2015 and June 30, ~~2013, 2014~~, in Appendix B, due to the inclusion of allowances for inflation and anticipated construction of additional State Water Project facilities. See “POWER SOURCES AND COSTS—State Water Project” in this Appendix A.
- (2) Minimum Operations, Maintenance, Power and Replacement (“OMP&R”) represents costs which are fixed and do not vary with the amount of water delivered.
- (3) Assumptions for water deliveries through the California Aqueduct (not including SBVMWD and DWA/CVWD transfers and exchanges) into Metropolitan’s service area and to storage programs are as follows: ~~0.56 million acre-feet for fiscal year 2014-15~~, 0.91 million acre-feet for fiscal year 2015-16, 0.91 million acre-feet for fiscal year 2016-17, 0.93 million acre-feet for fiscal year 2017-18, 0.93 million acre-feet for fiscal year 2018-18, and 0.93 million acre-feet for fiscal year ~~2018-19~~2019-20. Availability of State Water Project supplies vary and deliveries may include transfers and storage. All deliveries are within maximum contract amount and are based upon availability, as determined by hydrology, water quality and wildlife conditions. See “METROPOLITAN’S WATER SUPPLY—State Water Project—*Endangered Species Act Considerations*” in this Appendix A.

- (4) Annual totals include BDCP related costs for the fiscal years ended June 30, ~~2015~~2016 through June 30, ~~2019~~2020 of \$-0- in fiscal ~~years 2014-15 and year~~ 2015-16, \$15 million in fiscal year 2016-17, \$24 million in fiscal year 2017-18, ~~and~~ \$46 million in ~~2018-19, fiscal year 2018-19, and \$91 million in fiscal year 2019-20.~~ Projected BDCP costs are reflected in the ten-year financial forecast provided in the biennial budget for fiscal years 2014-15 and 2015-16 that was approved by Metropolitan's Board on April 8, 2014.

Other Long-Term Commitments

Metropolitan also has various ongoing fixed annual obligations under its contract with the United States Department of Energy for power from the Hoover Power Plant. Under the terms of the Hoover Power Plant contract, Metropolitan purchases energy to pump water through the CRA. In fiscal year ~~2013~~2014-1415 Metropolitan paid approximately ~~\$29.6~~39.6 million under this contract. Payments made under the Hoover Power Plant contract are treated as operation and maintenance expenses. On March 12, 2014, Metropolitan and the other Hoover Contractors funded the defeasance of \$124 million of bonds issued by the U.S. Treasury Department for facilities related to the Hoover Dam and Power Plant. Following this repayment, Metropolitan expects to reduce its annual payment for Hoover power by approximately \$2.3 million. See "POWER SOURCES AND COSTS—Colorado River Aqueduct" in this Appendix A.

Defined Benefit Pension Plan and Other Post-Employment Benefits

Metropolitan is a member of the California Public Employees' Retirement System ("PERS"), a multiple-employer pension system that provides a contributory defined-benefit pension for substantially all Metropolitan employees. PERS provides retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. PERS acts as a common investment and administrative agent for participating public entities within the State. PERS is a contributory plan deriving funds from employee contributions as well as from employer contributions and earnings from investments. A menu of benefit provisions is established by State statutes within the Public Employees' Retirement Law. Metropolitan selects optional benefit provisions from the benefit menu by contract with PERS.

Metropolitan makes contributions to PERS based on actuarially determined employer contribution rates. The actuarial methods and assumptions used are those adopted by the PERS Board of Administration. Employees are required to contribute seven percent of their earnings (excluding overtime pay) to PERS. Pursuant to the current memoranda of understanding, Metropolitan contributes the requisite seven percent contribution for all employees represented by the Management and Professional Employees Association, the Association of Confidential Employees, Supervisors and Professional Personnel Association and AFSCME Local 1902 and who were hired prior to January 1, 2012. Employees in all four bargaining units who were hired on or after January 1, 2012, pay the full seven percent employee contribution to PERS. Metropolitan contributes the entire seven percent on behalf of unrepresented employees. In addition, Metropolitan is required to contribute the actuarially determined remaining amounts necessary to fund the benefits for its members.

The contribution requirements of the plan members are established by State statute and the employer contribution rate is established and may be amended by PERS. ~~The fiscal year 2013-14 contribution requirement was based on the June 30, 2011 valuation report, the~~ The fiscal year 2014-15 contribution requirement is based on the June 30, 2012 valuation report, and the fiscal year 2015-16 contribution is based on the June 30, 2013 valuation report. The PERS' projected investment return (the discount rate) for fiscal years ~~2013-14, 2014-15, and 2015-16 is 7.5 percent, respectively.~~

For fiscal year ~~2013-14, 2014-15,~~ Metropolitan contributed ~~16.3~~17.65 percent of annual covered payroll. The fiscal year ~~2013-14~~2014-15 annual pension cost was ~~\$47.4~~47.0 million, of which ~~\$13.5~~12.7 million was for Metropolitan's pick-up of the employees' seven percent share. For fiscal year ~~2014-15 and fiscal year~~ 2015-16, Metropolitan is required to contribute ~~17.65 percent and~~ 19.74 percent, ~~respectively,~~ of annual covered payroll, in addition to member contributions paid by Metropolitan.

On April 17, 2013, the PERS Board of Administration approved changes to the amortization and smoothing policies to spread all gains and losses over a fixed 30-year period from a rolling 30-year period, and to recognize increases or decreases in investment returns over a 5-year period versus a 15-year period. In addition, PERS will no longer use an actuarial valuation of assets. These changes will result in higher employer contribution rates in the near term but lower rates in the long term. The new policies will be effective for fiscal year 2015-16. The following table shows the funding progress of Metropolitan's pension plan.

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**Metropolitan Pension Plan Assets
(dollars in billions)**

Valuation Date	Accrued Liability	Actuarial Value of Assets	Market Value of Assets	Funded (Unfunded)		Funded Ratios	
				Actuarial Value	Market Value	Actuarial Value	Market Value
6/30/13	\$1.805	N/A	\$1.356	N/A	(\$0.449)	N/A	75.1%
6/30/12	\$1.731	\$1.471	\$1.227	(\$0.260)	(\$0.504)	85.0%	70.9%
6/30/11	\$1.674	\$1.416	\$1.257	(\$0.258)	(\$0.417)	84.5%	75.1%
6/30/10	\$1.563	\$1.351	\$1.059	(\$0.212)	(\$0.504)	86.4%	67.7%
6/30/09	\$1.478	\$1.287	\$0.940	(\$0.191)	(\$0.538)	87.1%	63.6%
6/30/08	\$1.334	\$1.232	\$1.256	(\$0.102)	(\$0.078)	92.3%	94.1%

Source: California Public Employees' Retirement System.

For more information on the plan, see Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT ~~FOR FISCAL YEAR ENDED JUNE 30, 2014~~ AND BASIC FINANCIAL STATEMENTS FOR ~~THE NINE MONTHS~~ FISCAL YEARS ENDED MARCH 31, JUNE 30, 2015 and 2014 (UNAUDITED), AND JUNE 30, 2014."

Metropolitan currently provides post-employment medical insurance to retirees and pays the post-employment medical insurance premiums to PERS. On January 1, 2012, Metropolitan implemented a longer vesting schedule for retiree medical benefits, which applies to all new employees hired on or after January 1, 2012. Payments for this benefit were ~~\$13.1 million in fiscal year 2013-14 and are estimated to be \$12.8~~ \$13.0 million in fiscal year 2014-15. Under Governmental Accounting Standards Board Statement No. 45, Accounting and Financial Reporting by Employers for Post-employment Benefits Other Than Pensions, Metropolitan is required to account for and report the outstanding obligations and commitments related to such benefits, commonly referred to as other post-employment benefits ("OPEB"), on an accrual basis.

~~Metropolitan's annual required contribution ("ARC") for OPEB was \$39.9 million in fiscal year 2013-14. The most recent actuarial valuation dated June 30, 2013 was released in February of 2014. This valuation indicates that the ARC in fiscal years 2014-15 and 2015-16 are \$29.5 million and \$30.3 million, respectively.~~ The ARC was based on a June 30, ~~2011~~ 2013 actuarial valuation using the entry-age normal actuarial cost method with contributions determined as a level percent of pay. The actuarial assumptions included (a) a 7.25 percent investment rate of return, (b) a general inflation component of 3.0 percent and (c) increases to basic medical premiums of ~~8.5~~ 8.0 percent for non-Medicare plans for ~~2014, 2015~~, grading down to 5.0 percent for 2021 and thereafter. As of June 30, ~~2011, 2013~~, the date of the OPEB actuarial report, the unfunded OPEB liability was estimated to be ~~\$367.7~~ \$315.0 million. The unfunded actuarial accrued liability is amortized over a fixed 30-year period starting with fiscal year 2007-08 and ending in 2037. Changes to assumptions are amortized over a fixed 20-year period. Actuarial ~~gains and losses are amortized over a~~

~~rolling 15-year period. The most recent actuarial valuation dated June 30, 2013 was released in February of 2014. This valuation indicates that the ARC in fiscal years 2014-15 and 2015-16 are \$29.5 million and \$30.3 million, respectively. As of June 30, 2013 the unfunded OPEB liability was estimated to be \$315 million. This actuarial valuation used the same assumptions as the June 30, 2011 valuation except that actuarial gains and losses are amortized over a fixed 15-year period.~~

In September 2013, Metropolitan's Board established an irrevocable OPEB trust fund with an initial deposit of \$40.0 million. During fiscal year 2013-14, the Board approved funding of an additional \$100.0 million which was deposited into the irrevocable OPEB trust fund. As part of its biennial budget process, the Board approved the full funding of the ARC for fiscal years 2014-15 and 2015-16.

HISTORICAL AND PROJECTED REVENUES AND EXPENSES

The "Historical and Projected Revenues and Expenses" table below, for fiscal years 2010-11 and 2011-12, provides a summary of revenues and expenditures of Metropolitan prepared on a cash basis, which conforms to the Revenue Bond Resolution provisions regarding rates and additional Bonds (as defined in the Master Resolution) and Parity Obligations (as defined in the Master Resolution). See "METROPOLITAN EXPENDITURES—Limitations on Additional Revenue Bonds" in this Appendix A. Under cash basis accounting, water sales revenues are recorded when received (two months after billed) and expenses when paid (approximately one month after invoiced). The actual financial reports beginning in fiscal year 2012-13 and the financial projections for fiscal years ~~2014-2015-15-16~~ through ~~2018-19~~2019-20 are prepared on a modified accrual basis. This is consistent with the adopted biennial budget for fiscal years 2014-15 and 2015-16, which was prepared on a modified accrual basis instead of a cash basis. The table does not reflect the accrual basis of accounting, which is used to prepare Metropolitan's annual audited financial statements. The modified accrual basis of accounting varies from the accrual basis of accounting in the following respects: depreciation and amortization will not be recorded and payments of debt service will be recorded when due and payable. Under the modified accrual basis of accounting, revenues are recognized in the fiscal year in which they are earned and expenses are recognized when incurred. Thus water sales revenues are recognized in the month the water is sold and expenses are recognized when goods have been received and services have been rendered. The change to modified accrual accounting is for budgeting purposes and Metropolitan will continue to calculate compliance with its rate covenant, limitations on additional bonds and other financial covenants in the Resolutions in accordance with their terms.

The projections are based on assumptions concerning future events and circumstances that may impact revenues and expenses and represent management's best estimates of results at this time. See footnotes to the table below entitled "HISTORICAL AND PROJECTED REVENUES AND EXPENSES" and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES" for relevant assumptions, including projected water sales and average annual increase in the effective water rate, and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES" for a discussion of potential impacts. Some assumptions inevitably will not materialize and unanticipated events and circumstances may occur. Therefore, the actual results achieved during the projection period will vary from the projections and the variations may be material.

~~Estimated revenues and expenses in the table below reflect, for fiscal year 2014-15, actual financial results for the nine months ending March 31, 2015 and revised projections for the balance of the fiscal year, as reported to the Board in January 2015. For fiscal year 2014-15, Miscellaneous Revenues for fiscal year 2014-15 reflect the projected use of \$114.4142 million from the Water Management Fund and \$20.0 million from the Water Rate Stabilization Fund, reserves, to fund a like amount of costs for replenishing storage, purchasing transfers and funding drought response and conservation related programs. Fiscal year 2015-16 reflects the adopted budget for this year. For fiscal years 2016-17 through ~~2018-19~~2019-20, the projections reflect the ten-year financial forecast provided in the biennial budget for fiscal years 2014-15 and 2015-16 that was approved on April 8, 2014. This includes the projected issuance of \$140250 million of bonds through fiscal year ~~2018-19~~2019-20 to finance the CIP. See "MANAGEMENT'S DISCUSSION OF~~

HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Revenues and CAPITAL INVESTMENT PLAN—Capital Investment Plan Financing” in this Appendix A.

~~The projections in the table below assume that water sales will be 1.96~~ Water sales were 1.905 million acre-feet in fiscal year 2014-15. Water sales are projected to be 1.75 million acre-feet for each of fiscal years 2015-16 through ~~2018-19~~ 2019-20. Rates and charges increased by 1.5 percent on January 1, 2015 and will increase by 1.5 percent on January 1, 2016. Rates and charges are projected to increase 3.0 percent to 5.0 percent annually thereafter. Actual rates and charges to be effective in 2017 and thereafter are subject to adoption by Metropolitan’s Board. The projections were prepared by Metropolitan and have not been reviewed by independent certified public accountants or any entity other than Metropolitan. Dollar amounts are rounded.

Metropolitan’s resource planning projections are developed using a comprehensive analytical process that incorporates demographic growth projections from recognized regional planning entities, historical and projected data acquired through coordination with local agencies, and the use of generally accepted empirical and analytical methodologies. See “METROPOLITAN’S WATER SUPPLY—Integrated Water Resources Plan” and “—The Integrated Resources Plan Strategy” in this Appendix A. Metropolitan has conservatively set the water sales projections in the following table which are below its projections for resource planning purposes. Metropolitan estimates that its water sales projections have a seventy percent statistical likelihood of being exceeded, compared to the fifty percent exceedance levels in the projections of water sales used to set prior years’ budgets and rates. Nevertheless, Metropolitan’s assumptions have been questioned by directors representing SDCWA on Metropolitan’s Board. Metropolitan has reviewed SDCWA’s concerns and, while recognizing that assumptions may vary, believes that the estimates and assumptions that support Metropolitan’s projections are reasonable based upon history, experience and other factors as described above.

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HISTORICAL AND PROJECTED REVENUES AND EXPENSES^(a)
(Dollars in Millions)

	-----Actual-----					-----Projected-----				
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	<u>2</u>									
Water Sales ^(b)	\$996	\$1,062	\$1,283	\$1,485	\$1,431	\$1,314	\$1,338	\$1,378	\$1,422	\$1,482
Additional Revenue Sources ^(c)	<u>62</u>	<u>168</u>	<u>173</u>	<u>182</u>	<u>199</u>	<u>199</u>	<u>196</u>	<u>198</u>	<u>202</u>	<u>211</u>
Total Operating Revenues	<u>1,149</u>	<u>1,230</u>	<u>1,456</u>	<u>1,667</u>	<u>1,630</u>	<u>1,513</u>	<u>1,534</u>	<u>1,576</u>	<u>1,624</u>	<u>1,693</u>
O&M, CRA Power and Water Transfer Costs ^(d)	(531)	(476)	(456)	(512)	(719)	(577)	(587)	(613)	(640)	(660)
Total SWC OMP&R and Power Costs ^(e)	<u>(322)</u>	<u>(316)</u>	<u>(337)</u>	<u>(342)</u>	<u>(319)</u>	<u>(374)</u>	<u>(396)</u>	<u>(408)</u>	<u>(425)</u>	<u>(449)</u>
Total Operation and Maintenance	<u>(853)</u>	<u>(792)</u>	<u>(793)</u>	<u>(854)</u>	<u>(1,038)</u>	<u>(951)</u>	<u>(983)</u>	<u>-</u>	<u>(1,065)</u>	<u>(1,109)</u>
Net Operating Revenues	\$ 296	\$ 438	\$ -663	\$ 813	\$ 592	\$ 562	\$ 551	\$ 555	\$ 559	\$ 584
Miscellaneous Revenue ^(f)	<u>74</u>	<u>56</u>	<u>23</u>	<u>19</u>	<u>21</u>	<u>18</u>	<u>18</u>	<u>18</u>	<u>18</u>	<u>18</u>
Transfer from Reserve Funds ^(g)	-	-	-	-	(134)	-	-	-	-	=
Sales of Hydroelectric Power ^(h)	<u>22</u>	<u>31</u>	<u>25</u>	<u>15</u>	<u>48</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>21</u>	<u>21</u>
Interest on Investments ⁽ⁱ⁾	<u>(7)</u>	<u>(1)</u>	<u>(2)</u>	<u>19</u>	<u>18</u>	<u>13</u>	<u>28</u>	<u>33</u>	<u>32</u>	<u>32</u>
Adjusted Net Operating Revenues ^(j)	<u>409</u>	<u>536</u>	<u>709</u>	<u>866</u>	<u>769</u>	<u>749</u>	<u>627</u>	<u>622</u>	<u>626</u>	<u>655</u>
Bonds and Additional Bonds Debt Service ^(k)	(277)	(297)	(298)	(343)	(280)	(309)	(310)	(313)	(307)	(301)
Subordinate Revenue Obligations ^(l)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Funds Available from Operations	\$ 131	\$ 238	\$ 410	\$ 522	\$ 488	\$ 468	\$ 317	\$ 311	\$ 312	\$ 353
Bonds and Additional Bonds Debt Service Coverage ^(m)	<u>1.48</u>	<u>1.81</u>	<u>2.38</u>	<u>2.52</u>	<u>2.75</u>	<u>2.68</u>	<u>2.01</u>	<u>2.00</u>	<u>2.05</u>	<u>2.18</u>
Debt Service Coverage on all Obligations ⁽ⁿ⁾	<u>1.47</u>	<u>1.80</u>	<u>2.37</u>	<u>2.51</u>	<u>2.74</u>	<u>2.62</u>	<u>2.00</u>	<u>1.99</u>	<u>2.05</u>	<u>2.17</u>
Funds Available from Operations	\$ 131	\$ 238	\$ 410	\$ 522	\$ 488	\$ 468	\$ 317	\$ 311	\$ 312	\$ 353
Other Revenues (Expenses)	(23)	(35)	(5)	(6)	(8)	(8)	(8)	(9)	(9)	(9)
Pay-As-You Go Construction	(45)	(45)	(55)	(117)	(215)	(210)	(221)	(200)	(204)	(176)
Total SWC Capital Costs Paid from Current	<u>(119)</u>	<u>(112)</u>	<u>(88)</u>	<u>(68)</u>	<u>(53)</u>	<u>(35)</u>	<u>(72)</u>	<u>(83)</u>	<u>(84)</u>	<u>(89)</u>
Remaining Funds Available from Operations	<u>(35)</u>	<u>77</u>	<u>262</u>	<u>331</u>	<u>212</u>	<u>216</u>	<u>16</u>	<u>20</u>	<u>15</u>	<u>23</u>

Fixed Charge Coverage ^(o)			—	—	1.64	1.58			<u>1.53</u>
	1.03 <u>1.31</u>	1.83	2.10	2.30 <u>2.37</u>			1.57	1.5	
	<u>3</u>								
Property Taxes				<u>100</u> <u>95</u>	92	94	96	99	<u>101</u>
	<u>88</u> <u>90</u>	<u>90</u> <u>95</u>	95	95					
General Obligation Bonds Debt Service	(39)	(39) <u>40</u>	(40)	(40)	(22) <u>40</u>	(23)	(23)	(19)	(14)
SWC Capital Costs Paid from Taxes	(49) <u>51</u>	—	(55)	(55)	(78) <u>55</u>	(69)	(71)	(77)	(85)
		(51) <u>55</u>							
Net Funds Available from Current Year ^(p)	\$(35) <u>77</u>	\$77 <u>262</u>	\$262	\$331	\$212 <u>216</u>	\$16	\$20	\$15	\$23
PAYGO Funded from Prior Year Revenues					\$47	\$75	\$32		
Use of Water Management Funds Designated in Prior Year Revenues ^(q)					— <u>(114)</u>				
Use of and Water Rate Stabilization Funds Designated in Prior Year Revenues ^(g)					(20) <u>142</u>				

Source: Metropolitan.

(Footnotes on next page)

- (a) Unaudited. Prepared on a cash basis for fiscal years ended June 30, 2011 through fiscal year ending June 30, 2012, and on a modified accrual basis for fiscal years ending June 30, 2013 through June 30, ~~2019~~2020. Projected revenues and expenditures are based on assumptions and estimates used in the adopted 2014-15 and 2015-16 biennial budget and reflect the projected issuance of additional bonds—~~Projected revenues and expenditures for fiscal year 2014-15 include actual financial results for July 2014-March 2015 with revised projections for the balance of the fiscal year.~~
- (b) During the fiscal years ended June 30, ~~2014~~2012 through June 30, ~~2014~~2015, annual water sales (in acre-feet) were ~~1.63 million~~1.68 million ~~—~~ (including 225,000 acre-feet of replenishment sales), 1.86 million, 2.04 million and ~~2.04~~1,905 million, respectively. See “METROPOLITAN REVENUES—Water Sales Revenues,” the table entitled “SUMMARY OF WATER SOLD AND WATER SALES” in this Appendix A. The water sales projections (in acre-feet) are ~~1.96 million in fiscal years 2014-15, and~~ 1.75 million for fiscal years 2015-16 through ~~2018-19~~2019-20. Projections reflect Board adopted rate and charge increases of 1.5 percent, which became effective on January 1, 2015 and 1.5 percent, which will become effective on January 1, 2016. Rates and charges are projected to increase 3.0 percent to 5.0 percent per fiscal year thereafter, subject to adoption by Metropolitan’s Board. See “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES” below.
- (c) Includes receipts from water standby, readiness-to-serve and capacity charges. The term Operating Revenues excludes *ad valorem* taxes. See “METROPOLITAN REVENUES — Additional Revenue Components” in this Appendix A.
- (d) Water Transfer Costs are included in operation and maintenance expenses for purposes of calculating the debt service coverage on all Obligations.
- (e) Includes on and off aqueduct power and operation, maintenance, power and replacement costs payable under the State Water Contract. See “METROPOLITAN EXPENDITURES—State Water Contract Obligations” in this Appendix A.
- (f) May include lease and rental net proceeds, net proceeds from sale of surplus property, reimbursements, and federal interest subsidy payments for Build America Bonds. ~~Federal interest subsidy payments for Build America Bonds in fiscal years 2014-15 to 2018-19 are projected to be \$12.2 million and reflect a 7.3 percent reduction pursuant to federal budget sequestration. Includes in fiscal year 2010-11, \$8 million from surplus property sales and a \$28.2 million capital reimbursement received from the Calleguas Municipal Water District in fiscal year 2010-11 related to termination of the Las Posas water storage program. See “REGIONAL WATER RESOURCES—Local Water Supplies—Groundwater Storage Programs” in this Appendix A. Also includes in fiscal year 2011-12-12, \$27.5 million from CVWD for delivery of 105,000 acre-feet under an exchange agreement between Metropolitan and CVWD. See “METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct—Quantification Settlement Agreement” in this Appendix A.~~
- (g) For Fiscal Year 2014-15, reflects transfer of \$114.4 million from the Water Management Fund and \$20.0 million from the Water Rate Stabilization Fund.
- (h) Includes CRA power sales.
- (i) Does not include interest applicable to Bond Construction Funds, the Excess Earnings Funds, other trust funds and the Deferred Compensation Trust Fund. Fiscal year 2012-13 included Fair Value Adjustment of \$(13.8) million, as per modified accrual accounting
- (j) Adjusted Net Operating Revenues is the sum of all available revenues that the revenue bond resolutions specify may be considered by Metropolitan in setting rates and issuing additional Bonds and Parity Obligations.

- (k) Includes debt service on outstanding Bonds, ~~the parity lien State Revolving Fund Loan which was repaid on July 1, 2011~~ and additional Bonds (projected). Assumes issuance of additional Bonds as provided in budget assumptions for the adopted biennial budget for fiscal years 2014-15 and 2015-16 as follows: \$-0- ~~in each fiscal year~~ for fiscal ~~year 2014-15 through fiscal year~~ years 2015-16 and 2016-17, \$40 million in fiscal year 2017-18, ~~and~~ \$100 million in fiscal year 2018-~~19, 19,~~ and \$110 million in fiscal year 2019-20. For fiscal years 2013-14 and 2014-15, reflects the defeasance of the 2004 Series B Water Revenue Refunding Bonds, payable on July 1, 2014, through a payment of \$33.7 million to an escrow account on May 29, 2014. See “CAPITAL INVESTMENT PLAN—Capital Investment Plan Financing” in this Appendix A.
- (l) Consisting of subordinate lien California Safe Drinking Water Revolving Fund Loan debt service.
- (m) Adjusted Net Operating Revenues divided by the sum of debt service on outstanding Bonds, ~~the parity lien State Revolving Fund Loan which was repaid on July 1, 2011~~ and additional Bonds (projected)
- (n) Adjusted Net Operating Revenues, divided by the sum of debt service on outstanding Bonds, ~~the parity lien State Revolving Fund Loan which was repaid on July 1, 2011~~, the subordinate lien California Safe Drinking Water Revolving Fund Loan and additional Bonds (projected). See “METROPOLITAN EXPENDITURES—Subordinate Revenue Obligations” in this Appendix A.
- (o) Adjusted Net Operating Revenues, divided by the sum of State Water Contract capital costs paid from current year operations and debt service on outstanding Bonds, ~~the parity lien State Revolving Fund Loan which was repaid on July 1, 2011~~, the subordinate lien California Safe Drinking Water Revolving Fund Loan, and additional Bonds (projected).
- (p) For Fiscal Year 2012-13, includes amounts that were transferred prior to June 30, 2013: \$25 million to the Water Transfer Fund, \$25 million to a trust to pre-fund Metropolitan’s unfunded liability for other post-employment benefits, and \$25 million for PAYGO Construction. For Fiscal Year 2013-14, includes amounts transferred prior to June 30, 2014: \$100 million to a trust to pre-fund Metropolitan’s unfunded liability for other post-employment benefits; \$100 million for PAYGO Construction, \$232 million to the Water Management Fund, for water purchases to replenish storage and funding drought response programs. ~~See “METROPOLITAN REVENUES—Financial Reserve Policy” in this Appendix A.~~

MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES

Water Sales Revenues

Metropolitan relies on revenues from water sales for about 80 to 85 percent of its total revenues. In adopting the budget and rates and charges for each fiscal year, Metropolitan’s board reviews the anticipated revenue requirements and projected water sales to determine the rates necessary to produce substantially the revenues to be derived from water sales during the fiscal year. Metropolitan sets rates and charges estimated to provide operating revenues sufficient, with other sources of funds, to provide for payment of its expenses. See “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

Metropolitan’s Board has adopted annual increases in water rates each year beginning with the rates effective January 1, 2004. See “METROPOLITAN REVENUES—Rate Structure” and “—Classes of Water Service” in this Appendix A. On April 10, 2012, Metropolitan’s Board adopted water rate increases of 5.0 percent, effective January 1, 2013 and January 1, 2014. On April 8, 2014, Metropolitan’s Board adopted a 1.5 percent water rate increase, which became effective January 1, 2015, and an additional 1.5 percent water rate increase to become effective January 1, 2016.

The financial projections in the table above reflect the ten-year financial forecast provided in the biennial budget for fiscal years 2014-15 and 2015-16 that was approved by the Board on April 8, 2014. The 2014-15 and 2015-16 biennial budget and rates set the stage for predictable and reasonable rate increases over the ten-year planning period, with rates projected to increase 3.0 percent to 5.0 percent per year. Actual rates and charges to be effective in 2017 and thereafter are subject to adoption by Metropolitan’s Board as part of the biennial budget process, and the ten-year forecast will be updated as well.

Increases in rates and charges reflect increasing operations and maintenance costs due primarily to an increase in retirement-related benefit costs, higher pay-as-you-go funding levels projected for the next two fiscal years of approximately \$513 million for the CIP, and increasing State Water Project costs, when compared to fiscal year 2013-14. However, projected higher levels of revenue funding for the CIP and the projected use of reserves over target were projected to reduce revenue requirements in the later years of the forecast.

Metropolitan’s revenues exceeded expenses during fiscal year 2013-14, 2014-15, resulting in a substantial/significant increase in ~~its unrestricted reserves as of June 30, 2014.~~ unrestricted reserves. On May

29. 2015, Metropolitan's Board approved the use of \$160 million of unrestricted reserves, above the target reserve level, for conservation incentives. In addition, \$50 million from the Water Stewardship Fund and \$140 million from the Water Management Fund, will fund conservation incentives. As of June 30, 2015, Metropolitan's unrestricted reserves were \$~~487476~~ million ~~on June 30, 2014,~~ on a modified accrual basis. On ~~April 8, 2014,~~ July 14, 2015, Metropolitan's Board approved ~~the use of unrestricted reserves over the target level at June 30, 2014 as follows: \$100~~\$264 million ~~deposit to acquire various properties in Riverside and Imperial Counties, with \$160 million funded from~~ the Replacement and Refurbishment Fund ~~for pay as you go funding of the CIP; \$100 million deposited to the Other Post Employment Benefits (OPEB) Trust; and the remaining amount of over target reserve levels, \$232 million, to a Water Management Fund, which will cover costs associated with replenishing storage, purchasing transfers and funding drought response programs. These amounts include \$137~~ from unrestricted reserves. On September 22, 2015, Metropolitan's Board approved \$44.4 million to pay SNWA to store 150,000 acre-feet of water with Metropolitan. This water will be available to Metropolitan during 2015. When SNWA requests the return of any of the stored water, SNWA will reimburse Metropolitan for an equivalent proportion of the \$44.4 million, based on the amount of water returned plus inflation. This amount will be funded from unrestricted reserves. See "METROPOLITAN'S WATER SUPPLY—Interim Surplus Guidelines" in this Appendix A. Unrestricted reserves, as of June 30, 2015, include \$188 million, held in Metropolitan's financial reserves, pursuant to the exchange contract between Metropolitan and SDCWA due to SDCWA's litigation challenging Metropolitan's rate structure (see "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority" and "METROPOLITAN REVENUES—Litigation Challenging Rate Structure" in this Appendix A).

Water Sales Projections

Water sales forecasts in the table above are: ~~1.96 million acre-feet in fiscal year 2014-15, and~~ 1.75 million acre-feet, for each of fiscal years 2015-16 through 2018-19, 2019-20. For purposes of comparison, Metropolitan's highest water sales during the past six fiscal years was approximately 2.3 million acre-feet in fiscal year 2007-08 and lowest was 1.63 million acre-feet in fiscal year 2010-11. See "METROPOLITAN REVENUES—Water Sales Revenues" in this Appendix A.

Metropolitan's water sales projections are the result of a comprehensive retail demand, conservation, and local supply estimation process, including supply projections from member agencies and other water providers within Metropolitan's service area. Retail demands for water are estimated with a model driven by projections of relevant demographics provided by SCAG and SANDAG. Retail demands are adjusted downward for conservation savings and local supplies, with the remainder being the estimated demand for Metropolitan supplies. Conservation savings estimates include all conservation programs in place to date as well as estimates of future conservation program goals that will result from regional 20 percent reductions by 2020 conservation savings. See "METROPOLITAN'S WATER SUPPLY—Water Conservation" in this Appendix A. Local supplies include water produced by local agencies from various sources including but not limited to groundwater, surface water, locally-owned imported supplies, and recycled water (see "REGIONAL WATER RESOURCES"). For example, water sales projections for ~~both years of the biennial budget for fiscal years 2014-15 and~~ 2015-16 assume that local projects such as groundwater recovery and desalination projects (see "REGIONAL WATER RESOURCES—Local Water Supplies") will become operational and produce local supplies in 2016. For additional description of Metropolitan's water sales projections, see "HISTORICAL AND PROJECTED REVENUES AND EXPENSES" in this Appendix A.

The water sales projections used to determine water rates and charges assume an average year hydrology. Actual water sales are likely to vary from projections. Over the ~~ten~~eleven-year period from fiscal year 2004-05 through fiscal year ~~2013-14, 2014-15,~~ actual water sales exceeded budgeted sales for the fiscal year in ~~five~~six fiscal years, with the greatest positive variance in fiscal year 2013-14 when actual sales of 2.04 million acre-feet were 120 percent of budgeted sales (1.70 million acre-feet). Actual sales were less than budgeted sales in five fiscal years, with the greatest negative variance in fiscal year 2010-11 when actual sales of 1.63 million acre-feet were 84 percent of budgeted sales (1.93 million acre-feet). In years when

actual sales exceed projections, the revenues from water sales during the fiscal year will exceed budget, potentially resulting in an increase in financial reserves. In years when actual sales are less than projections, Metropolitan uses various tools to manage reductions in revenues, such as reducing expenses below budgeted levels, reducing funding of capital from revenues, and drawing on reserves. See “METROPOLITAN REVENUES—Financial Reserve Policy” in this Appendix A. Metropolitan considers actual sales, revenues and expenses, and financial reserve balances in setting rates for future fiscal years.

Operation and Maintenance Expenses

Operation and maintenance expenses in fiscal year ~~2013-14~~ 2014-15 were ~~\$854 million~~ 1.05 billion, which represented approximately ~~57.66~~ percent of total costs. These expenses include the costs of labor, electrical power, materials and supplies of both Metropolitan and its contractual share of the State Water Project. The cost of power for pumping water through the aqueducts is a major component of this category of expenditures.

Metropolitan’s Board adopted a budget benchmark in September 2004 to limit the annual increase in departmental operations and maintenance budgets to no more than the five-year rolling average change in the Los Angeles/Orange/Riverside Counties consumer price index. The fiscal year ~~2013-14~~ 2014-15 departmental expenses of ~~\$369.392~~ million were approximately 7.0 percent and 6.4 percent higher than expenses in fiscal years ~~2012-13~~ 2013-14 and ~~2011-12~~ 2012-13, respectively.

POWER SOURCES AND COSTS

General

Current and future costs for electric power required for operating the pumping systems of the CRA and the State Water Project are a substantial part of Metropolitan’s overall expenses. ~~Expenditures~~ Expenses for electric power for the CRA (not including credits from power sales and related revenues) for the fiscal years ~~2011-12~~, ~~2012-13~~ and 13, 2013-14 and 2014-15 were approximately ~~\$30.0 million~~, \$18.4 million, and \$29.6 million, and \$39.6 million, respectively. ~~Expenditures~~ Expenses for electric power and transmission service for the State Water Project for fiscal years ~~2011-12~~, ~~2012-13~~ and 13, 2013-14 and 2014-15 were approximately ~~\$214.1~~ 218.1 million, ~~\$218.1~~ 157.4 million and ~~\$157.4~~ 140.8 million, respectively. Given the continuing uncertainty surrounding the electricity markets in California and in the electric industry in general, Metropolitan is unable to give any assurance with respect to the magnitude of future power costs.

Colorado River Aqueduct

Generally 55 to 70 percent of the annual power requirements for pumping at full capacity (1.25 million acre-feet of Colorado River water) in Metropolitan’s CRA are secured through long-term contracts with the United States Department of Energy for energy generated from facilities located on the Colorado River (Hoover Power Plant and Parker Power Plant) and Edison. These contracts provide Metropolitan with reliable and economical power resources to pump Colorado River water to Metropolitan’s service area.

On December 20, 2011, President Obama signed into law the Hoover Power Allocation Act of 2011 (H.R. 470). This new law requires the Western Area Power Administration to renew existing contracts for electric energy generated at the Hoover Power Plant for an additional 50 years through September 2067. The contractors will retain 95 percent of their existing power rights. The law will allow Metropolitan to continue to receive a significant amount of power from the Hoover power plant after the current contract expires in 2017.

The remaining approximately 30 to 45 percent of annual pumping power requirements for full capacity pumping on the CRA is obtained through energy purchases from municipal and investor-owned utilities or power marketers. Gross diversions of water from Lake Havasu for the fiscal years ended June 30, ~~2013~~ 2014 and June 30, ~~2014~~ 2015 were approximately ~~767,622~~ 1.12 million acre-feet and ~~1,117,578~~ 1.19

million acre-feet, respectively, including Metropolitan's basic apportionment of Colorado River water and supplies from water transfer and ~~groundwater~~ storage programs.

The Metropolitan-Edison 1987 Service and Interchange Agreement includes provisions for the sharing of the benefits realized by the integrated operation of Edison's and Metropolitan's electric systems. Under this agreement, with a prior year pumping operation of 1 million acre-feet, Edison provides Metropolitan additional energy (benefit energy) sufficient to pump approximately 140,000 acre-feet annually. As the amount of pumping is increased, the amount of benefit energy provided by Edison is reduced.

Under maximum pumping conditions, Metropolitan can require up to one million megawatt-hours per year in excess of the base resources available to Metropolitan from the Hoover Power Plant, the Parker Power Plant, and Edison benefit energy. Metropolitan is a member of the Western Systems Power Pool ("WSPP"), and utilizes its industry standard form contract to make wholesale power purchases at market cost. Metropolitan acquires the majority of its supplemental power from WSPP members. In calendar years 2010 and 2011, Metropolitan purchased 755,000 megawatt-hours and 100,000 megawatt-hours, respectively, of energy above its base power resources. In calendar year 2013, Metropolitan pumped approximately 1.013 million acre-feet of its Colorado River water and additional supplies from other Colorado River sources but did not purchase any additional energy supplies above its base power resources. In calendar year 2014, Metropolitan purchased approximately 527,000 megawatt-hours of additional energy.

State Water Project

The State Water Project's power requirements are met from a diverse mix of resources, including State-owned hydroelectric generating facilities. DWR has long-term contracts with Morgan Stanley (unspecified energy sources), Metropolitan (hydropower), Kern River Conservation District (hydropower) and the Northern California Power Agency (natural gas generation). The remainder of its power needs is met by short-term purchases. Metropolitan pays approximately 70 percent of State Water Project power costs.

DWR is seeking renewal of the license issued by FERC for the State Water Project's Hyatt-Thermalito hydroelectric generating facilities at Lake Oroville. A Settlement Agreement containing recommended conditions for the new license was submitted to FERC in March 2006. That agreement was signed by over 50 stakeholders, including Metropolitan and other State Water Project Contractors. With only a few minor modifications, FERC staff recommended that the Settlement Agreement be adopted as the condition for the new license. DWR issued a Final EIR for the relicensing project on July 22, 2008. On August 21, 2008, Butte County and Plumas County filed separate lawsuits against DWR challenging the adequacy of the Final EIR. This lawsuit also named all of the signatories to the Settlement Agreement as "real parties in interest," since they could be adversely affected by this litigation. A trial was conducted in January 2012. On May 16, 2012, the court found that the EIR prepared in conjunction with the relicensing was adequate and dismissed the lawsuit against DWR. On August 7, 2012, Butte and Plumas Counties filed a notice of appeal. Briefing on the appeal was completed in May 2013. No date has been set for oral argument. Regulatory permits and authorizations are required before the new license can take effect. Chief among these is a biological opinion from the National Marine Fisheries Service setting forth the terms and conditions under which the relicensing project must operate in order to avoid adverse impacts to threatened and endangered species. DWR has filed an application requesting this biological opinion. FERC has issued one-year renewals of the existing license since its initial expiration date on January 31, 2007, and is expected to issue successive one-year renewals until a new license is obtained.

DWR receives transmission service from investor-owned utilities under existing contracts and from the California Independent System Operator, a nonprofit public benefit corporation formed in 1996 pursuant to legislation that restructured and deregulated the electric utility industry in California. The transmission service provider may seek increased transmission rates, subject to the approval of FERC. DWR has the right to contest any such proposed increase. DWR may be subject to increases in the cost of transmission service as new electric grid facilities are constructed.

Energy Management Program

~~Metropolitan staff completed a comprehensive Energy Management and Reliability Study in late 2009 and~~ Metropolitan's Board adopted energy management policies in August 2010 that provide objectives for future energy-related projects to contain costs and reduce Metropolitan's exposure to energy price volatility, increase operational reliability through renewable energy projects, provide a revenue stream to offset energy costs and move Metropolitan toward energy independence. Metropolitan's Energy Management Program ~~mandates that Metropolitan design and operate its facilities in the most energy efficient and cost-effective manner. This program~~ includes: setting design standards for energy-efficient facilities; taking advantage of available rebates for energy efficiency and energy-saving projects; operating Metropolitan's facilities in the most energy-efficient manner; and continuing to investigate alternative energy sources, such as solar, small hydroelectric generation and wind power. Metropolitan has completed ~~energy efficiency assessments at all five of its water treatment plants and is evaluating recommendations for proposed changes. Metropolitan has completed~~ construction of a one-megawatt ("MW") solar generation facility at the Robert A. Skinner Treatment Plant and is ~~investigating additional solar power generation at other treatment plants and facilities. Metropolitan has begun constructing a three MW solar facility at its F. E. Weymouth Treatment Plant. Metropolitan also plans to install a one MW solar facility at the Joseph Jensen Treatment Plant. Finally, Metropolitan continues~~ integrating fuel-efficient hybrid vehicles into its fleet and is assessing the use of alternative fuels ~~(biodiesel)~~ for its off-road vehicles and construction equipment. ~~Finally, Metropolitan is assessing the feasibility of expanding its hydroelectric generation capabilities.~~

~~In February 2007, the Board authorized Metropolitan's membership in the California Climate Action Registry, a nonprofit voluntary registry for greenhouse gas emissions that was established by the Legislature in 2000. Metropolitan began annual reporting of its certified baseline greenhouse gas inventory, or carbon footprint, in calendar year 2005 to the California Climate Action Registry. In calendar year 2010, Metropolitan's emissions reporting transitioned from the California Climate Action Registry. Metropolitan reports its greenhouse gas emissions~~ to The Climate Registry, a nonprofit North American emission registry. Metropolitan also reports required emissions data to the California Air Resources Board ("CARB") under mandatory reporting regulations adopted pursuant to AB 32, California's Global Warming Solutions Act. ~~On December 16, 2010, CARB adopted of 2006. On October 20, 2011, CARB approved~~ a regulation for a California cap on greenhouse gas emissions under AB 32, ~~and after additional workshops, public comment and further consideration, approved the regulation on October 20, 2011,~~ with compliance deferred to 2013. Under the regulation, Metropolitan is regulated as an importer of energy and is required to purchase allowances to cover any greenhouse gas emissions associated with its supplemental imported energy. Metropolitan did not incur cap and trade allowance obligations in 2013. However, Metropolitan did incur an obligation in ~~2014. As of 2014 and 2015. For the three-year period from January 1, 2013 through~~ December 31, ~~2014, 2015.~~ Metropolitan ~~has spent approximately \$3.3 million's expenditures~~ are expected to be approximately \$3.3 million.

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THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

VIA EMAIL

June 22, 2015

Director Michael T. Hogan
Director Keith Lewinger
Director Fern Steiner
Director Yen C. Tu
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated June 5, 2015 (received June 7, 2015) regarding Board Letter 8-2

This letter addresses your comments, received June 7, 2015, on Draft Appendix A to the Official Statement for Metropolitan's Special Variable Rate, Water Revenue Refunding Bonds, 2015 Series A-1 and 2015 Series A-2, as attached to Board Letter 8-2. Your general comments are addressed below, followed by your specific comments and Metropolitan's responses.

Appendix A provides material financial and operating information about Metropolitan to potential investors. Appendix A is prepared by Metropolitan staff and reviewed by Metropolitan's Board of Directors. Metropolitan's objective is to provide complete and accurate disclosure regarding the bonds being offered and their security and source of payment to potential investors. Appendix A is updated for each bond offering to provide current information. Forward-looking statements or projections are based on current information such as the facts and assumptions contained within the biennial budget and ten-year financial forecast.

The ***General Comments*** in your letter incorporate by reference comments from prior letters regarding Metropolitan's authorization, execution and distribution of Official Statements in connection with the issuance of bonds, which were most recently addressed in Metropolitan's response letter dated March 17, 2015 ("March 2015 Response") to SDCWA's Comment Letter dated March 9, 2014 ("March Letter"). Metropolitan's March 2015 Response (see Attachment 1) was electronically provided to all SDCWA directors and copied to Metropolitan's Board of Directors on March 17, 2015.

Regarding your terminal comment relating to over-collection of \$803 million from Metropolitan's member agency rate payers, Metropolitan disagrees with the underlying assertion and the unsupported suggestion that Metropolitan may be subjected to claims related to the revenues collected for water service to its member agencies.

Comments on Draft Appendix A dated May 28, 2015

The following specific SDCWA comments and Metropolitan's responses refer to the draft of Appendix A dated May 28, 2015, showing changes from the February 26, 2015 draft (Attachment 2).

A-7: Metropolitan's Water Supply and A-8-9: Drought Response Actions. MWD continues to understate the severity of MWD's current water supply conditions. See Attachment 1: March 6, 2015 letter to MWD board RE Water Supply Management Strategies including Use of Storage. Regarding drought response actions, it is unclear -- if not misleading -- for MWD to state that the conservation program largely made up of turf removal "is expected to result" in annual water savings of 80,000 acre-feet in the context of discussion of the current drought and without a time reference. No one, not even MWD itself, has estimated current or near-term annual water savings of that magnitude as a result of these expenditures; indeed, even long-term Turf Removal Program results are uncertain. MWD should also disclose that its recent action to increase conservation program spending, primarily turf removal spending, leaves MWD with limited available funding to purchase water transfers if the drought persists, or to replenish depleted storage reserves if supplies become available, *without adopting significant water rate increases*. See Attachment 2: May 8 and May 25, 2015 letters to the MWD board RE: Board Memo 8-2: Authorize (1) \$150 million in additional funding for conservation incentives from the Water Stewardship Fund and the Water Management Fund; and (2) Implementation of modifications to the Turf Removal Program – Oppose and RE: Board Memo 5-1: Authorize (1) Additional funding for conservation incentives; and (2) Implementation of modification to the Turf Removal Program.

Metropolitan Response: Board Letter 5-1 dated May 26, 2015 states that total water savings for Option #3, the Option approved by the Board, is projected to be 800,000 acre-feet over the next ten years. Those numbers are consistent with the annual estimate in Appendix A. However, Metropolitan has revised Appendix A to state the ten year estimate and removed the annual estimate. In addition, it is projected that Metropolitan will have up to \$480 million in the Water Rate Stabilization Fund and Revenue

Remainder Fund to fund the purchase of water transfers and/or replenish storage in fiscal year 2015-16.

A-11: Water Transfers and Exchanges. What is the addition of the term "acquisition" to this section of the draft Appendix A intended to convey?

Metropolitan Response:

Thank you for your comment. The term is duplicative and will be removed from Appendix A.

A-26: Intentionally-Created Surplus Program. This section, as amended, more accurately describes potential limitations on MWD's access to intentionally-created surplus (ICS) as a result of current water supply and storage conditions. This information was not provided to the board at the time it voted to declare the Water Supply Condition 3 and implementation of the Water Supply Allocation Plan at a Level 3 Regional Storage Level.

Metropolitan Response: The potential that shortage conditions on the Lower Basin of the Colorado River could limit Metropolitan's access to ICS reserves, as well as other supply uncertainties, were disclosed to the Board when the Board voted to declare the Water Supply Condition 3 and implementation of the Water Supply Allocation Plan at a Level 3 Regional Storage Level in Board Letter 8-3, dated April 14, 2015.

A-33-34: Water Supply Allocation Plan. The draft Appendix A states that, "[i]mplementation of the Water Supply Allocation Plan at a Level 3 Regional Shortage Level is anticipated to reduce supplies delivered by MWD to MWD's member agencies by 15 percent and water sales to approximately 1.8 million acre-feet." However, this month's Water Surplus and Drought Management (WSDM) Plan states that demand at Level 3 equates to 1.93 million acre-feet, more than 100,000 acre-feet more than stated in the draft Appendix A. Under current water supply and storage conditions, this discrepancy is material; please provide information to reconcile these numbers or correct the staff WSDM report or draft Appendix A.

Metropolitan Response:

The June 2015 Water Surplus and Drought Management Plan report states that "the regional demand limit" at Level 3 is estimated to be 1.93 million acre-feet, not that demands at Level 3 equate to 1.93 million acre-feet. In other words, the aggregate amount of water available to member agencies without an allocation surcharge is estimated to be 1.93 million acre-feet. However, Metropolitan estimates that member agencies will purchase, in aggregate, 100,000 acre-feet lower than the full amount available to them without an allocation surcharge. When the Water Supply Allocation Plan was approved by the Board in April, Metropolitan initially estimated that the regional demand limit (the aggregate amount of water available to member agencies without a surcharge) would be 1.9 million acre-feet, and therefore the corresponding

member agency demands estimate was 100,000 acre-feet less, or approximately 1.8 million acre-feet. The 1.8 million acre-feet figure is provided in Appendix A.

A-35: Los Angeles Aqueduct. The Agreement between DWR, Antelope Valley-East Kern Water Agency and MWD contains specific limitations regarding the use of the subject turnout for delivery of non-State Water Project water annually to the City of Los Angeles. Why is the language at the bottom of page A-35 being deleted?

Metropolitan Response: The changes were made to this language in Appendix A to better reflect the terms of the Agreement.

A-58: Litigation Challenging Rate Structure. What is your reasoning for deleting the statement that, “[a]mounts held pursuant to the Exchange Agreement are transferable to SDCWA to pay any amounts awarded by the court in the event SDCWA prevails in its claim for breach of the Exchange Agreement”? We disagree with the change because it conceals a large potential liability from MWD’s bondholders, and is inconsistent with MWD’s prior practice of disclosure, its litigation position that the interest-bearing is a set-aside to pay for possible damages, and the fact that MWD has already been held liable for breaching the Exchange Agreement.

Metropolitan Response: Thank you for your comment. This was an inadvertent change and the sentence has been reinserted.

A-61: Water Standby Charges. In an effort to avoid the application of Proposition 26, MWD has argued (unsuccessfully) in the rate litigation that it does not "impose" its water standby charge. The suggested edit at page A-61 is purely litigation-driven and a matter of form over substance; it is misleading to state or suggest that MWD does not impose a water standby charge.

Metropolitan Response: This change aligns the language in the Official Statement to Resolution 9191, Continuing the Water Standby Charge for Fiscal Year 2015/16, adopted by the Board on May 12, 2015.

A-87: Historical and Projected Revenues and Expenses. This table includes the transfer and expenditure of monies from the Water Management Fund and Water Rate Stabilization Fund, but does not identify expenditures from the Water Stewardship Fund. We assume that these fund transfers will be used for to pay for the Conservation and Turf Removal Program, as approved by the Board at its May 26, 2015 Special Workshop. The Board also approved the transfer and use of monies from the Water Stewardship Fund, and yet the table does not reflect the transfer and use of this fund.

Metropolitan Response: Use of monies from the Water Stewardship Fund for conservation related expenses is not expected until fiscal year 2015-16. The table referred to in Appendix A reflects budgeted fiscal year 2015-16 financial operations, per the Board’s adopted 2015-16 biennial budget. Projections for the current fiscal year include actual financial results through March 31, 2015, and revised projections for the balance of fiscal year 2014-15.

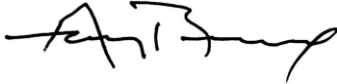
SDCWA Directors

June 22, 2015

Page 5

Thank you for your comments on Metropolitan's Official Statement. We have carefully reviewed and considered them and circulated them to our bond counsel team, financial advisor, and underwriters. Appendix A will be revised to address certain comments as described in this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Breaux". The signature is stylized and cursive.

Gary Breaux

Assistant General Manager/Chief Financial Officer

cc: J. Kightlinger
MWD Board Members
SDCWA Board of Directors and Member Agencies

Attachment 1— Metropolitan's Response Letter dated March 17, 2015 to SDCWA's Comment Letter received March 9, 2015 (dated March 9, 2014).



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

VIA EMAIL

March 17, 2015

Director Michael T. Hogan
Director Keith Lewinger
Director Yen C. Tu
Director Fern Steiner
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated March 9, 2014 (received March 9, 2015) regarding Board Letter 8-1

This letter addresses your comments, which were received on March 9, 2015 on Draft Appendix A to the Remarketing Statements for Metropolitan's Water Revenue Refunding Bonds, 2011 Series A-2 and A-4 and 2012 Series B-1 and B-2, as attached to Board Letter 8-1. Your general comments are addressed below, followed by your specific comments and Metropolitan's responses.

Appendix A provides material financial and operating information about Metropolitan to potential investors. Appendix A is prepared by Metropolitan staff. As we have pointed out in prior responses to SDCWA comments on bond disclosures, Bond counsel does not serve as disclosure counsel and will not be responding to your letter. Metropolitan's objective is to provide complete and accurate disclosure regarding the bonds being offered and their security and source of payment to potential investors, not to promote Metropolitan's position in any litigation. Appendix A is updated for each bond offering to provide current information. Forward-looking statements or projections are based on current information such as the facts and assumptions contained within the biennial budget and ten-year financial forecast.

The ***General Comments*** in your letter are generally a restatement of the comments from prior letters, which were most recently addressed in Metropolitan's response letter dated November 20, 2014 ("November 2014 Response") to SDCWA's Comment Letter dated

November 17, 2014 ("November Letter"). Metropolitan's November 2014 Response (see Attachment 1) was electronically provided to all SDCWA directors and copied to Metropolitan's Board of Directors on November 20, 2014.

Additionally, your comment regarding past edits to page A-51, prompted additional revisions to Appendix A to clarify the description of *ad valorem* tax levies and limitations, as well as the suspension of the *ad valorem* tax limitation, which is provided for within the MWD Act.

Comments on Draft Appendix A dated February 26, 2015

The following specific SDCWA comments and Metropolitan's responses refer to the draft of Appendix A dated February 26, 2015, showing changes from the November 6, 2014 draft (Attachment 2).

A-3: Metropolitan's Water Supply and A-4: Drought Response Actions. The discussion in these and other sections of the draft Appendix A fails to accurately report the severity of MWD's current water supply conditions in the context of this fourth-consecutive drought year or for 2016 and beyond. See our March 6, 2015 letter to the MWD board RE: Water Planning and Stewardship Committee Agenda/Water Supply Management Strategies Including Use of Storage, incorporated herein by reference. Taken together with other sections of the draft Appendix A, in which water sales are projected for the next five years (see page A-83) but where the source or cost of the water to be sold is not identified, the draft Appendix A fails to present an accurate picture of MWD's water supply situation or financial risk.

Metropolitan Response: See p.2 of the November 2014 Response to the November Letter RE A-4. Appendix A describes the current hydrologic conditions for watersheds that affect Metropolitan's sources of supply, includes a table showing Metropolitan's water storage levels for January 1, 2013 through January 1, 2015, and contains updated information regarding Metropolitan's many agreements and transfer, storage and exchange programs. Furthermore, Metropolitan has identified its plan to meet water demands in 2015, including the possibility of implementation of its water supply allocation plan if hydrologic conditions do not improve.

A-7: State Water Project. We presume the final document will be corrected to reflect the recent action taken by the Department of Water Resources (DWR) to increase the SWP allocation to 20%. With regard to SWP supplies, we believe MWD should also disclose that it used all of its available DWR flex storage in 2014 (219,000 AF) and that those supplies not only will not be available in 2015, but must be paid back to DWR within five years. More broadly, MWD should make full disclosure in the draft Appendix A of all water supplies it has "borrowed" and which therefore include pay-back requirements that could affect the availability of supplies in future years. MWD should also disclose the unique service requirements associated with serving the "SWP-Exclusive Area;" this issue has not previously been addressed in MWD's Integrated Resources Plan (IRP).

Metropolitan Response: Before printing, Appendix A will be updated to reflect the 20 percent State Water Project allocation which was announced on March 2, 2015, and any additional allocation adjustments.

With regard to SWP supplies, Metropolitan has disclosed in the table on Page A-30 that in 2014 it used 219,000 acre-feet of Metropolitan's flexible storage under its State Water Contract. See "METROPOLITAN'S WATER SUPPLY— STORAGE CAPACITY AND WATER IN STORAGE" in Appendix A. To reinforce this point, Metropolitan will describe the use and terms of such flexible storage in the accompanying footnote to the table. Metropolitan has two other "payback" arrangements. As noted below, the arrangement with SNWA is disclosed in Appendix A. Also, as reported to the Board, Metropolitan has entered into a series of payback arrangements with Irvine Ranch totaling less than 10,000 acre feet of water. Metropolitan does not have any other "payback" arrangements.

See p.3 of the November 2014 Response to the November Letter RE A-4 with respect to delivery limitations in areas served exclusively by the State Water Project.

A-16: Colorado River. The draft Appendix A should be revised to include a discussion about current Basin States' efforts to increase storage in Lake Mead and the US Bureau of Reclamation's analysis regarding the probability of shortages on the Colorado River beginning in 2016. These shortages, coupled with continued drought and severe limitations on SWP supplies present material water supply and financial challenges to MWD. MWD has borrowed 162,000 AF of water from the Southern Nevada Water Authority; as noted above, this and other water supply "debt" should be fully disclosed in the Appendix A. At page A-5, MWD added language that the CRA is anticipated to operate at capacity in 2015, "assuming additional supplies are acquired." MWD should identify how much water it needs to keep the CRA operating at capacity and the potential sources of water supplies to do so.

Metropolitan Response: Following the March report to the Board at the Water Planning and Stewardship Committee meeting, Metropolitan anticipates operating the CRA near capacity (capacity is defined in Appendix A as 1.25 million acre-feet), using a combination of Colorado River water that Metropolitan has contractual rights to and water available under other programs that were developed to augment Colorado River supplies. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct" in Appendix A. See also Presentation 6b, Water Planning and Stewardship Committee, March 9, 2015. Additional supplies may become available and could increase Metropolitan's Colorado River imports to over 1.1 million acre-feet in 2015.

Metropolitan is a signatory to the December 10, 2014 non-binding MOU for pilot drought response actions. Any actions taken on behalf of this MOU are subject to Board approval and are not expected to affect Metropolitan's water supplies in the near future. Finally, terms of Metropolitan's agreement with Southern Nevada Water Authority relating to Implementation of Interim Colorado River Surplus Guidelines are disclosed in

Appendix A. See “METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct-Interim Surplus Guidelines” in Appendix A.

A-30: MWD's Water Storage Capacity and Water in Storage. The amount of water in storage shown does not match data presented in MWD's January 2015 WSDM report; please reconcile the differences. We also believe MWD should amend this presentation to clearly reflect how much water is available for dry-year use and how much is required for emergency storage (626,000 AF).

Metropolitan Response: The minor discrepancies between the storage table presented to the Board in MWD’s January 2015 WSDM report and the “STORAGE CAPACITY AND WATER IN STORAGE” table in Appendix A are attributable to end of year accounting adjustments. Accounts listed in the tables are reconciled after the end of the year and minor adjustments are made when the final accounting is done. The fact that the numbers in these tables are subject to accounting updates is stated in footnotes to both tables. The water storage data in Appendix A was accurate as of the date of the distribution and may be updated prior to printing.

A-31: Water Conservation. This section of the draft Appendix A is misleading because MWD has not measured and its conservation programs do not require any measurement of actual water conservation savings from MWD programs. There is no evidence to support the statement that the 2009-2012 water sales numbers reflect the "success" of MWD's water conservation programs.

Metropolitan Response: Like other water agencies, Metropolitan uses the average water savings numbers established by various sources, including the California Urban Water Conservation Council, agency studies, or engineering estimates to calculate the amount of water saved by device retrofits and other water use efficiency projects. That average saving number is multiplied by the number of devices and projects that received rebates from Metropolitan. Furthermore, for some of Metropolitan’s larger conservation programs, rebates are in fact based on reductions measured by meters. Based on calculated savings and metering results, Metropolitan estimates that these programs resulted in approximately 166,000 acre of water conserved in fiscal year 2013-14. See http://www.mwdh2o.com/mwdh2o/pages/yourwater/SB60/archive/SB60_2015.pdf. These programs contributed to the lower than budgeted water sales recorded during 2009-12.

A-32: Water Surplus and Drought Management Plan and Water Supply Allocation Plan. See concerns expressed at A-3, above. Regarding Preferential Rights, contrary to the statement in the draft Appendix A, these rights have been "used" in many ways over the years in allocating MWD's water. MWD itself has been clear that the MWD board does not have the authority to change rights MWD member agencies have under the MWD Act, including Preferential Rights. If MWD persists in making this misleading statement, it should at a minimum disclose as a recent example, that in October 2014, the Central Basin Municipal Water District asserted a

claim to water based on Preferential Rights. The claim was only "rescinded" after MWD agreed to provide additional water supplies it had previously refused to deliver.

Metropolitan Response: See p.4 of the November 2014 Response to the November Letter RE A-32. Contrary to your assertion, to date, preferential rights have not been used in allocating Metropolitan's water. The preferential rights disclosure is included because the statutory right exists and any member agency might exercise its preferential right to purchase water in the future. The example of preferential rights being "used" by Central Basin Municipal Water District is incorrect. Central Basin Municipal Water District cited the preferential rights statute when it requested delivery of State Water Project water to its service connection CENB-48. However, preferential rights do not provide any member agency with a right to delivery of water from a specific source or to a specific connection.

A-51: Metropolitan Revenues. See November Letter at p. 3, RE A-49: Metropolitan Revenues: General. Given the reality that many MWD member agencies are planning to reduce their purchases of MWD water, MWD should describe the role it anticipates tax revenues may play or it believes must play in the future in order to sustain MWD's fiscal integrity.

Metropolitan Response: See p.5 of the November 2014 Response to the November Letter RE A-49. Future findings regarding fiscal integrity, if any, will be within the discretion of Metropolitan's Board and cannot be predicted at this time.

A-55: Litigation Challenging Rate Structure. MWD should disclose that the amount of damages awarded to the Water Authority may be determined by the Court in an amount that exceeds the amount that is held in the escrow account. Further, that the Court's April 24, 2014 Statement of Decision found that Proposition 26 applies to MWD to all rates set after the date of enactment of the measure. Finally, the draft should disclose that the May 2014 case has been stayed by stipulation of the parties.

Metropolitan Response: Thank you for your comment. Metropolitan has revised Appendix A to reflect the trial court's ruling that the set aside provision of the Exchange Agreement is not "a mechanism to set the damages in a dispute over price." A further addition has been made to reflect the court's order staying the 2014 action.

A-57: Member Agency Purchase Orders. MWD should disclose that there is no cost of service basis for the terms described in MWD purchase orders. See also November Letter at p. 4, RE A-56: Member Agency Purchase Orders.

Metropolitan Response: See p.6 of the November 2014 Response to the November Letter RE A-56.

A-58: Classes of Water Service. See November Letter at p. 4, RE A-56: Classes of Water Service.

Metropolitan Response: See p.6 of the November 2014 Response to the November Letter RE A-56.

A-59: Additional Revenue Components. MWD is proposing an edit that is inconsistent with all past cost of service analyses by MWD, namely, to change the statement that the RTS charge is designed to recover "a" portion of capital expenditures for infrastructure projects needed to provide standby service and peak conveyance needs, to the statement that the charge is designed to recover "the" portion of capital expenditures made for those purposes. This is nothing more than ex post facto "sleight of hand" designed to shore up MWD's litigation posture. There is no cost of service analysis to support this change and the change is inconsistent with how MWD's cost of service was performed and with how its rates have been established. If MWD wants to make this change, it must do so as a matter of substance, with an accurate calculation of costs MWD incurs to provide standby service and peak conveyance needs. That is not what is captured by the current RTS charge and that is what the current cost of service report states, which is different than the "edit" MWD is proposing to make in the draft Appendix A.

Metropolitan Response: This change aligns the language in the Official Statement disclosure to Resolution 9173, fixing and adopting the Readiness-to-Serve Charge for calendar year 2015, adopted by the Board on April 8, 2014.

A-60: Financial Reserve Policy. Proposition 26 applies to MWD; as a result, the MWD board does not have complete discretion ex post facto to determine how to spend over-collected revenues that are not based on any cost of service analysis. The planned over-collection of revenues and refusal to account for and track revenues by rate category subjects MWD to the further risk of litigation based on its unlawful practices.

Metropolitan Response: The reserve policy, establishing minimum and target reserve levels, was approved by the Board in the 1999 Update to the Long Range Finance Plan. The policy utilized probability studies of wet periods that affect Metropolitan's water sales. This analysis is described in Chapter Four of the 1999 Update to the Long Range Finance Plan (see Attachment 3). This policy is adopted in section 5202 of the Administrative Code.

The attached ten-year summary (see Attachment 4) shows the calculated reserve minimum, target reserve and actual reserves at the end of each fiscal year and average rate increases. In fiscal years 2009-10 and 2010-11 rate increases would have been higher if not for this use of reserves. In fiscal years 2012-13 and 2013-14 Metropolitan authorized use of reserves over target to fund capital expenditures, reduce long-term obligations and fund drought management programs. Use of reserves is incorporated in the cost-of-service analysis and rate projections.

A-62: Ten Largest Customers. See November Letter at p. 5, RE A-62.

Metropolitan Response: See p.7 of the November 2014 Response to the November Letter RE A-62.

A-63: California Ballot Initiatives. See November Letter at p. 5, RE A-63.

Metropolitan Response: See p.8 of the November 2014 Response to the November Letter RE A-63.

A-76: State Water Contract Obligations. As noted above and in numerous prior letters we have authored on a variety of subjects, the Water Authority believes it is highly misleading for MWD to substitute old estimates or arbitrary numbers for planning purposes when actual numbers (or at least more reasonable estimates based on currently known data) are available. No more clear illustration exists how this skews financial and water resource planning (and, in this context, how it misrepresents information to investors) than MWD's use of "budgeted" State Water Project costs. MWD chose to "budget" based on a 50% water supply allocation at the same time the actual allocation was 5%. In the draft Appendix A, MWD is still using its budget numbers to describe its projected costs for SWP water, even though the SWP allocation is actually 20% with very little if any expectation of change this year. This means that MWD is (mis)representing that it will incur costs to acquire SWP water that it knows it will not incur and sell SWP water that it knows it will not have to sell.

Metropolitan Response: Much of the information contained in Appendix A including information on projected costs for the State Water Project are based on either information presented to Metropolitan's Board at a public meeting or from a Board action. Regarding projections for costs associated with the State Water Project, Metropolitan consistently has used projections that were either approved by the Board (such as projections associated with Metropolitan's adopted biennial budget for FY 2014/15 and 2015/16) or from projections presented to the Board reflecting actual results through a certain period of time. Projections for FY 2014/15 were presented to the Board at its January 2015 meeting and updated to reflect actual results through December 2014 as well as revised projections for the period from January 2015 to June 2015. Should the Board decide to change any of the projections for State Water Project costs from FY 2014/15 to FY 2018/19, then those revisions will be reflected in Appendix A.

A-82: Historical and Projected Revenues and Expenses. Based on the available information, it is unreasonable to predict that MWD water sales will be as described at page A-83 unless the drought ends, MWD finds sources of water supply that it has thus far been able to identify or secure or MWD imposes deeper supply cuts. The description of forecasted MWD water sales should include a more robust analysis of water supplies remaining in storage and where MWD expects to secure the water it needs to meet these sales projections.

Metropolitan Response: Metropolitan delivers a reliable water supply to the region throughout a variety of hydrologic conditions. Metropolitan has a diverse water supply portfolio and has made long-term investments in storage programs, conservation, local

resource development, and drought response to help meet customer demands. Historically, Metropolitan's water sales have varied widely during dry periods. It is reasonable for Metropolitan to base the proposed biennial budget and revenue requirement on a conservative sales estimate of 1.75 million acre-feet (MAF). Variations in revenues and costs due to hydrology will be managed by use of financial reserves established for this purpose, including the use of Water Management designated funds. The Water Management Fund provides funds to cover costs associated with replenishing storage, purchasing transfers, and providing drought response programs.

A-84: Operations Funded from Prior Year Revenues. Please identify 1) why operations are being funded by prior year revenues (and whether the same operations were also included in the current year's budget); 2) the source of revenues used to pay these operating costs; and 3) why operating costs would be paid from revenues deposited to the Water Management Fund.

Metropolitan Response: On April 8, 2014 Metropolitan's Board approved the use of unrestricted reserves over the target reserve level for pay-as-you-go funding of the CIP; for deposit into the OPEB Trust; and for deposit into a Water Management Fund for use to cover costs associated with replenishing storage, purchasing transfers, and for funding drought response programs. The table on page A-84 of the draft Appendix A entitled "Historical and Projected Revenues and Expenses" is set up primarily to conform to provisions contained in Metropolitan's Master Water Revenue Bond Resolution which includes the flow of funds to determine water revenue bond debt service coverage. Board approved expenditures from the Water Management Fund must be recognized as operating expenditures in a given year, but since the expenditures are funded from monies available in the Water Management Fund, the expenditures do not have to be paid from water revenues (or from operating revenues) generated in a given year. As such, those expenditures paid from the Water Management Fund must not be included in the calculation to determine water revenue bond debt service coverage. The line items and the footnotes added to the table on page A-84 reflect the exclusion of expenditures paid from the Water Management Fund from the debt service coverage calculations. The expenditures from the Water Management Fund are classified as O&M expenditures, and were not budgeted for FY 2014/15. Metropolitan will revise the fiscal year projections for expenditures funded from the Water Management Fund should additional expenditures be approved by the Board.

In addition, to clarify the understanding of the wording for the line item at the bottom of the table on page A-84 entitled, "Operations Funded from Prior Year Revenues," Metropolitan will change the wording to "Use of Water Management Funds Designated in Prior Year."

A-87: Water Sales Projections. See discussion above, at A-82. Where will MWD secure the water supplies that water sales projections are based on?

SDCWA Directors

March 17, 2015

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Metropolitan Response: See Metropolitan's response to "A-82: *Historical and Projected Revenues and Expenses*" above.

Thank you for your comments on Metropolitan's Remarketing Statements. We have carefully reviewed and considered them and circulated them to our bond counsel team, financial advisor, and underwriters. Appendix A will be revised to address certain comments as described in this letter.

Sincerely,



Gary Breaux

Assistant General Manager/Chief Financial Officer

cc: J. Kightlinger
MWD Board Members
SDCWA Board of Directors and Member Agencies

Attachment 1— Metropolitan's Response Letter dated November 20, 2014 to SDCWA's Comment Letter dated November 17, 2014

Attachment 2— Appendix A draft dated February 26, 2015, showing changes from the November 6, 2015 draft

Attachment 3—Long Range Finance Plan, 1999 Update, Chapter 4 Fund Policies

Attachment 4—Ten-year summary of reserve minimum, target and actual reserves and average rate increases

APPENDIX A

The Metropolitan Water District of Southern California



Draft Dated ~~11/06/14~~
2/26/15

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INTRODUCTION

This Appendix A provides general information regarding The Metropolitan Water District of Southern California (“Metropolitan”), including information regarding Metropolitan’s operations and finances. Statements included or incorporated by reference in this Appendix A constitute “forward-looking statements.” Such statements are generally identifiable by the terminology used such as “plan,” “project,” “expect,” “estimate,” “budget” or other similar words. Such statements are based on facts and assumptions set forth in Metropolitan’s current planning documents including, without limitation, its most recent biennial budget. The achievement of results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Actual results may differ from Metropolitan’s forecasts. Metropolitan is not obligated to issue any updates or revisions to the forward-looking statements in any event.

Metropolitan maintains a website that may include information on programs or projects described in this Appendix A; however, none of the information on Metropolitan’s website is incorporated by reference or intended to assist investors in making an investment decision or to provide any additional information with respect to the information included in this Appendix A. The information presented on Metropolitan’s website is not part of the Official Statement and should not be relied upon in making investment decisions.

Formation and Purpose

Metropolitan is a metropolitan water district created in 1928 under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended (herein referred to as the “Act”). The Act authorizes Metropolitan to: levy property taxes within its service area; establish water rates; impose charges for water standby and service availability; incur general obligation bonded indebtedness and issue revenue bonds, notes and short-term revenue certificates; execute contracts; and exercise the power of eminent domain for the purpose of acquiring property. In addition, Metropolitan’s Board of Directors (the “Board”) is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan’s service area.

Metropolitan’s primary purpose is to provide a supplemental supply of water for domestic and municipal uses at wholesale rates to its member public agencies. If additional water is available, such water may be sold for other beneficial uses. Metropolitan serves its member agencies as a water wholesaler and has no retail customers.

The mission of Metropolitan, as promulgated by the Board, is to provide its service area with adequate and reliable supplies of high quality water to meet present and future needs in an environmentally and economically responsible way.

Metropolitan’s charges for water sales and availability are fixed by its Board, and are not subject to regulation or approval by the California Public Utilities Commission or any other state or federal agency. Metropolitan imports water from two principal sources: northern California via the Edmund G. Brown California Aqueduct (the “California Aqueduct”) of the State Water Project owned by the State of California (the “State” or “California”) and the Colorado River via the Colorado River Aqueduct (“CRA”) owned by Metropolitan.

Member Agencies

Metropolitan is comprised of 26 member public agencies, including 14 cities, 11 municipal water districts, and one county water authority, which collectively serve the residents and businesses of more than

300 cities and numerous unincorporated communities. Member agencies request water from Metropolitan at various delivery points within Metropolitan’s system and pay for such water at uniform rates established by the Board for each class of water service. Metropolitan’s water is a supplemental supply for its member agencies, most of whom have other sources of water. See “METROPOLITAN REVENUES—Principal Customers” in this Appendix A for a listing of the ten member agencies with the highest water purchases from Metropolitan during the fiscal year ended June 30, 2014. Metropolitan’s member agencies may, from time to time, develop additional sources of water. No member is required to purchase water from Metropolitan, but all member agencies are required to pay readiness-to-serve charges whether or not they purchase water from Metropolitan. See “METROPOLITAN REVENUES—Rate Structure”, “—Member Agency Purchase Orders” and “—Additional Revenue Components” in this Appendix A.

The following table lists the 26 member agencies of Metropolitan.

<u>Municipal Water Districts</u>		<u>Cities</u>		<u>County Water Authority</u>
Calleguas	Las Virgenes	Anaheim	Los Angeles	San Diego ⁽¹⁾
Central Basin	Orange County	Beverly Hills	Pasadena	
Eastern	Three Valleys	Burbank	San Fernando	
Foothill	West Basin	Compton	San Marino	
Inland Empire Utilities Agency		Fullerton	Santa Ana	
Upper San Gabriel Valley		Glendale	Santa Monica	
Western of Riverside County		Long Beach	Torrance	

(1) The San Diego County Water Authority, currently Metropolitan’s largest customer, is a plaintiff in litigation challenging the allocation of costs to certain rates adopted by Metropolitan’s Board. See “METROPOLITAN REVENUES—Litigation Challenging Rate Structure” in this Appendix A.

Service Area

Metropolitan’s service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. When Metropolitan began delivering water in 1941, its service area consisted of approximately 625 square miles. Its service area has increased by 4,500 square miles since that time. The expansion was primarily the result of annexation of the service areas of additional member agencies.

Metropolitan estimates that approximately ~~18.4~~18.5 million people lived in Metropolitan’s service area in ~~2013~~2014, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (“SCAG”) and the San Diego Association of Governments (“SANDAG”). Population projections prepared by SCAG in 2012 and SANDAG in 2010, as part of their planning process to update regional transportation and land use plans, show expected population growth of about 18 percent in Metropolitan’s service area between 2010 and 2035. The 2010 Census population estimates are incorporated into SCAG’s 2012 projections. The 2010 SANDAG regional growth projections do not incorporate the 2010 Census population estimates. The economy of Metropolitan’s service area is exceptionally diverse. In 2013, the economy of the six counties which contain Metropolitan’s service area had a gross domestic product larger than all but fifteen nations of the world. Metropolitan has historically provided between 40 and 60 percent of the water used annually within its service area. For additional economic and demographic information concerning the six county area containing Metropolitan’s service area, see Appendix E – “SELECTED DEMOGRAPHIC AND ECONOMIC INFORMATION FOR METROPOLITAN’S SERVICE AREA.”

The climate in Metropolitan’s service area ranges from moderate temperatures throughout the year in the coastal areas to hot and dry summers in the inland areas. Annual rainfall in an average year has

historically been approximately 13 to 15 inches along the coastal area, up to 20 inches in foothill areas and less than 10 inches inland.

METROPOLITAN'S WATER SUPPLY

Metropolitan's principal sources of water supplies are the State Water Project and the Colorado River. Metropolitan receives water delivered from the State Water Project under State Water Contract provisions, including contracted supplies, use of carryover storage in San Luis Reservoir, and surplus supplies. See "—State Water Project" below. Metropolitan holds rights to a basic apportionment of Colorado River water and has priority rights to an additional amount depending on availability of surplus supplies. See "—Colorado River Aqueduct" below. Water management programs supplement these Colorado River supplies. Metropolitan stores State Water Project and Colorado River supplies in Metropolitan surface water reservoirs and through storage and water transfer agreements. See "—Water Transfer, Storage and Exchange Program" and "Storage Capacity and Water in Storage" below.

Metropolitan faces a number of challenges in providing adequate, reliable and high quality water supplies for southern California. These include, among others: (1) population growth within the service area; (2) increased competition for low-cost water supplies; (3) variable weather conditions; and (4) increased environmental regulations. Metropolitan's resources and strategies for meeting these long-term challenges are set forth in its Integrated Water Resources Plan, as updated from time to time. See "—Integrated Water Resources Plan" below. ~~Metropolitan's principal sources of water are the State Water Project and the Colorado River. Court decisions have restricted deliveries from the State Water Project in recent years as described below under "—State Water Project—Endangered Species Act Considerations." Precipitation, in the form of snow or rain, and its resulting runoff and storage levels are key indicators for Metropolitan's supplies from both its State Water Project and Colorado River sources. Snowpack, as presented below, is a percentage of the April 1 historical average water content. April 1 is recognized as the typical peak of the season in any given year.~~ In addition, Metropolitan manages water supplies in response to the prevailing hydrologic conditions by implementing its Water Surplus and Drought Management Plan, and in times of prolonged or severe shortages, the Water Supply Allocation Plan. See "—Water Surplus and Drought Management Plan" and "—Water Supply Allocation Plan" below.

Hydrologic conditions can have a significant impact on Metropolitan's water supply. California hydrology, which impacts deliveries from the State Water Project, is highly variable from year to year. In March 2011, following a three-year drought, California Governor Jerry Brown proclaimed an end to the statewide drought emergency proclaimed in February 2009 by then-Governor Arnold Schwarzenegger, which impacts deliveries to Metropolitan from the State Water Project. In 2011, California's snowpack peaked at 163 percent of normal. ~~Drier~~ However, drier conditions returned for ~~2012, with~~ 2012 and California statewide snowpack ~~peaking in mid-April 2012~~ peaked at 64 percent of normal. After large storms in November and December of 2012, California started 2013 with above normal snowpack conditions for the State. However, the California 2013 snowpack peaked ~~in March~~ at 61 percent of normal, and associated runoff was 65 percent of normal. Calendar year 2013 was the driest on record in much of California ~~and dry conditions continued through January 2014. Despite above average precipitation in February and March of 2014, Department of Water Resources ("DWR") storage in key reservoirs has been well below normal in 2014. For example, as of October 5, 2014, storage in Lake Oroville, the principal State Water Project reservoir, was at 49 percent of average capacity and storage in San Luis Reservoir, a joint use facility of the State Water Project and federal Central Valley Project that is located south of the San Francisco Bay/Sacramento San Joaquin River Delta ("Bay Delta"), was at 48 percent of average capacity. The 2014 snowpack peaked at 35 percent of normal in April 2014 and associated runoff was 41 percent of normal.~~ Due to these record-dry conditions and lower than average water levels in State reservoirs, Governor Brown proclaimed a drought emergency on January 17, 2014. On January 31, 2014, DWR reduced the State Water Project allocation percentage to zero, reflecting the severity of California's drought.

~~On April 18, 2014, DWR increased State Water Project Contractors' allocations of State Water Project water from zero to five percent due to February and March storms. Such allocations are made annually as a percentage of contracted amounts. At five percent, Metropolitan's State Water Project allocation for 2014 is approximately 95,000 acre feet. DWR may revise allocations if warranted by the year's developing hydrologic and water supply conditions. See "METROPOLITAN'S WATER SUPPLY—State Water Project" in this Appendix A. Despite improved conditions in February and March 2014, drought conditions continue and state water supplies remain far below average. As a result~~The 2014 snowpack peaked at 35 percent of normal in April 2014 and associated runoff was 41 percent of normal, the fourth lowest in history. As a result of the persistent dry conditions, Governor Brown issued an executive order on April 25, 2014, strengthening the ~~state~~State's authority to respond to the drought. The executive order expedites approvals of water transfers and exchanges, eases some environmental compliance requirements for drought response actions, and calls upon businesses and homeowners to limit potable water consumption, especially for landscaping.

On January 15, 2015, DWR increased the State Water Project allocation to State Water Project contractors to 15 percent of contracted amounts, replacing the initial 2015 allocation of 10 percent. DWR may revise the allocation estimate if warranted by the year's developing precipitation and water supply conditions. See "—State Water Project—General" below.

Metropolitan's other principal source of water supply, the Colorado River, comes from watersheds of the Upper Colorado River basin in the states of Colorado, Utah, and Wyoming. Due to the way that Colorado River Supplies are apportioned, snowpack and runoff levels do not impact Metropolitan water supplies in the current year. Instead, snowpack and runoff impact storage levels at Lake Powell and Lake Mead, which in turn affect the likelihood of surplus or shortage conditions in the future. ~~Precipitation in~~

As of February 22, 2015, precipitation in the upper Colorado River Basin was 76 percent of normal, with snowpack at 80 percent of normal for water year ~~2013-14~~2014-15 (October 1 – September 30) ~~was above average, resulting in a forecasted unregulated inflow to Lake Powell of approximately 10078 percent of normal, which is only the fourth time this has happened since water year 2003-04. As of September 7, 2014, As of February 22, 2015,~~ total system storage in the Colorado River Basin was ~~5149~~ percent of normal, which is equivalent to ~~September 2013 storage levels~~capacity. See "—Colorado River Aqueduct" below.

Uncertainties from potential future temperature and precipitation changes in a climate driven by increased concentrations of atmospheric carbon dioxide also present challenges. Areas of concern to California water planners identified by researchers include: reduction in Sierra Nevada snowpack; increased intensity and frequency of extreme weather events; and rising sea levels resulting in increased risk of damage from storms, high-tide events, and the erosion of levees and potential cutbacks of deliveries from the State Water Project. While potential impacts from climate change remain subject to study and debate, climate change is among the uncertainties that Metropolitan seeks to address through its planning processes.

Drought Response Actions

At this time, it is not possible to forecast the impact of the current California drought on Metropolitan water supplies. Metropolitan ~~estimates that's~~ 2014 year-end overall water storage ~~will be between 1.7 million acre feet and 2.0~~was approximately 1.8 million acre-feet. In 2014, Metropolitan ~~has been able to utilize~~utilized supplies from the Colorado River to offset reductions in State Water Project supplies and mitigate impacts of the California drought. Metropolitan is also encouraging responsible and efficient water use to lower demands. Since Governor Brown's January 2014 drought emergency proclamation, Metropolitan has worked proactively with its member agencies to conserve water supplies in its service area. In February 2014, Metropolitan declared a Water Supply Alert, calling upon local cities and water agencies to immediately implement extraordinary conservation measures and institute local drought

ordinances. Metropolitan also significantly expanded its water conservation and outreach programs. This includes ~~doubling~~increasing the water conservation budget for fiscal years 2013-14 and 2014-15 by a total of \$60 million, increasing the incentive for a turf replacement program, and launching the largest media outreach campaign in Metropolitan's history. Metropolitan also increased incentives for large landscape customers to convert from potable water to recycled water for irrigation. See “—Water Conservation” below.

Metropolitan is prepared to meet water demands in its service area in calendar year 2015 using a combination of CRA deliveries, storage reserves and supplemental water transfers and purchases. In 2015, the CRA is anticipated to operate at capacity, assuming additional supplies are acquired, and operations to ~~move~~distribute Colorado River supplies into areas normally served by State Water Project supplies that began in 2014 are expected to continue in 2015. ~~Metropolitan is also working to carryover unused 2014 State Water Project supplies into 2015.~~—These measures will offset ~~potentially~~the low initial State Water Project supply allocations in 2015. Metropolitan also relies upon its Water Surplus and Drought Management ~~Plan~~ (“WSDM ~~Plan~~”) Plan to identify resource actions in times of shortage and its Water Supply Allocation Plan for equitable distribution of available water supplies in case of extreme shortages. Should drought conditions continue through 2015, Metropolitan is prepared to implement the Water Supply Allocation Plan. See “—Storage Capacity and Water in Storage,” “—Water Conservation,” “—Water Surplus and Drought Management Plan” and “—Water Supply Allocation Plan” below.

Metropolitan's financial reserve policy provides funds to manage through periods of reduced sales. See “METROPOLITAN REVENUES—Financial Reserve Policy.” In years when actual sales are less than projections, Metropolitan uses various tools to manage reductions in revenues, such as reducing expenditures below budgeted levels, reducing funding of capital from revenues, and drawing on reserves. In years when actual sales exceed projections, the revenues from water sales during the fiscal year will exceed budget, potentially resulting in an increase in financial reserves. On April 8, 2014, Metropolitan's Board approved multiple uses of certain unrestricted reserves over the target level on June 30, 2014, which included a deposit of ~~\$252232~~ million to a Water Management Fund, ~~\$232 million of~~ which will cover costs associated with replenishing storage, purchasing transfers and funding drought response programs, ~~and \$20 million for conservation related programs~~. See “MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Revenues” in this Appendix A.

Integrated Water Resources Plan

The Integrated Water Resources Plan (“IRP”) is Metropolitan's principal water resources planning document. Metropolitan, its member agencies, sub-agencies and groundwater basin managers developed their first IRP, which was adopted by the Board in January 1996 and updated in 2004, as a long-term planning guideline for resources and capital investments. The ~~next update of the~~ IRP is scheduled to be updated in ~~2015~~2015-16. The purpose of the IRP was the development of a portfolio of preferred resources (see “—The Integrated Resources Plan Strategy” below) to meet the water supply reliability and water quality needs for the region in a cost-effective and environmentally sound manner.

On October 12, 2010, Metropolitan's Board adopted an IRP update (the “2010 IRP Update”) as a strategy to set goals and a framework for water resources development. This strategy enables Metropolitan and its member agencies to manage future challenges and changes in California's water conditions and to balance investments with water reliability benefits. The 2010 IRP Update provides an adaptive management approach to address future uncertainty, including uncertainty from climate change. It was formulated with input from member agencies, retail water agencies, and other stakeholders including water and wastewater managers, environmental and business interests and the community. The framework places an emphasis on regional collaboration.

The 2010 IRP Update seeks to provide regional reliability through 2035 by stabilizing Metropolitan's traditional imported water supplies and continuing to develop additional local resources, with an increased emphasis on regional collaboration. It also advances long-term planning for potential future contingency resources, such as storm water capture and large-scale seawater desalination, in close coordination with Metropolitan's 26 member agencies and other utilities.

The 2010 IRP Update is available on Metropolitan's web site at <http://www.mwdh2o.com/mwdh2o/pages/yourwater/irp/>. Specific projects that may be developed by Metropolitan in connection with the implementation of the IRP will be subject to future Board consideration and approval, as well as environmental and regulatory documentation and compliance. The information set forth on Metropolitan's website is not incorporated by reference.

The Integrated Resources Plan Strategy

The IRP Strategy identifies a balance of local and imported water resources within Metropolitan's service area. Metropolitan expects that the core resource strategy, uncertainty buffers and foundational actions in the IRP Strategy will be continually reviewed and updated at least every five years to reflect changing demand and supply conditions. Foundational actions include technical studies and research (up to pilot projects, but not full-scale projects) that enable timely, future implementation of challenging resources, including, but not limited to, recycled water, seawater desalination, stormwater capture, and groundwater enhancement.

The following paragraphs describe several elements of the IRP Strategy.

State Water Project. The State Water Project is one of Metropolitan's two major sources of water. In addition to municipal and industrial use of this core supply, State Water Project supplies are important for maximizing local groundwater potential and the use of recycled water since State Water Project water has lower salinity content than Colorado River Aqueduct water and can be used to increase groundwater conjunctive use applications. See “—State Water Project” below and “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

Colorado River Aqueduct. The Colorado River Aqueduct delivers water from the Colorado River, Metropolitan's original source of supply. Metropolitan has helped to fund and implement farm and irrigation district conservation programs, improvements to river operation facilities, land management programs and water transfers and exchanges through agreements with agricultural water districts in southern California and entities in Arizona and Nevada that use Colorado River water. See “—Colorado River Aqueduct” below.

Water Conservation. Conservation and other water use efficiencies are integral components of Metropolitan's IRP. Metropolitan has invested in conservation programs since the 1980s. Historically, most of the investments have been in water efficient fixtures in the residential sector. Current efforts also focus on outdoor and commercial water use. See “—Water Conservation” below.

Recycled Water. Reclaimed or recycled municipal and industrial water is a valuable water resource and can be used for landscape irrigation, agriculture, protecting groundwater basins from saltwater intrusion, industrial processes, and recharging local aquifers. Metropolitan offers financial incentives to member agencies for developing economically viable reclamation projects. See “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

Conjunctive Use. Conjunctive use is the coordinated use of surface water supplies and groundwater storage. It entails storing surplus imported water during the winter months or wet years in local surface reservoirs and recharging local groundwater basins, then using the stored supplies during dry months and

droughts, thus increasing the supply reliability of the region. See “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

Water Transfers and Exchanges. Under voluntary water transfer or exchange agreements, agricultural communities using irrigation water may periodically sell some of their water allotments to urban areas. The water may be delivered through existing State Water Project or Colorado River Aqueduct facilities, or may be exchanged for water that is delivered through such facilities. Metropolitan’s policy toward potential transfers states that the transfers will be designed to protect and, where feasible, enhance environmental resources and avoid the mining of local groundwater supplies. See “—Water Transfer, Storage and Exchange Programs” below.

Groundwater Recovery. Natural groundwater reservoirs serve an important function as storage facilities for local and imported water. In cases where groundwater storage has become contaminated, water agencies have to rely more heavily on imported water supplies. Treatment for polluted groundwater is quite costly and poses environmental challenges. Metropolitan offers financial incentives to help fund member agency groundwater recovery projects. See “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

Seawater Desalination. Seawater desalination is the process of removing salts from ocean water to produce potable supplies. It is a potential new local supply that could help increase supply reliability in Metropolitan’s service area. Metropolitan offers financial incentives to member agencies for seawater desalination projects through its Seawater Desalination Program. Currently, there are a number of seawater desalination projects either under development or in the planning phase within Metropolitan’s service area. See “REGIONAL WATER RESOURCES—Local Water Supplies” and “METROPOLITAN REVENUES—Rate Structure” in this Appendix A.

State Water Project

General. One of Metropolitan’s two major sources of water is the State Water Project, which is owned by the State and operated by DWR. This project transports Feather River water stored in and released from Oroville Dam and unregulated flows diverted directly from Bay-Delta south via the California Aqueduct to four delivery points near the northern and eastern boundaries of Metropolitan’s service area. The total length of the California Aqueduct is approximately 444 miles.

In 1960, Metropolitan signed a water supply contract (as amended, the “State Water Contract”) with DWR. Metropolitan is one of 29 agencies that have long-term contracts for water service from DWR, and is the largest agency in terms of the number of people it serves (approximately ~~18.4~~18.5 million), the share of State Water Project water that it has contracted to receive (approximately 46 percent), and the percentage of total annual payments made to DWR by agencies with State water contracts (approximately 53 percent for 2013). For information regarding Metropolitan's obligations under the State Water Contract, see “METROPOLITAN EXPENDITURES—State Water Contract Obligations” in this Appendix A. Upon expiration of the State Water Contract term (currently in 2035), Metropolitan has the option to continue service under substantially the same terms and conditions. Metropolitan and other agencies with state water supply contracts are currently in negotiations with DWR to extend the State Water Contract. In June 2014, DWR and the State Water Project Contractors reached an Agreement in Principle (“AIP”) to extend the contract to 2085 and to make certain changes related to financial management of the State Water Project in the future. The AIP will serve as the “proposed project” for purposes of environmental review under the California Environmental Quality Act (“CEQA”). DWR issued a Notice of Preparation of an Environmental Impact Report (“EIR”) for the proposed project on September 14, 2014. Following CEQA review, a State Water Project amendment will be prepared. Such amendment will be subject to review by the Legislature.

The State Water Contract, under a 100 percent allocation, provides Metropolitan 1,911,500 acre-feet of water. (An acre-foot is the amount of water that will cover one acre to a depth of one foot and equals approximately 326,000 gallons, which represents the needs of two average families in and around the home for one year.) The 100 percent allocation is referred to as the contracted amount. ~~Each~~Late each year in ~~November~~, DWR announces an initial allocation estimate for the upcoming year, but may revise the estimate throughout the year if warranted by developing precipitation and water supply conditions. From calendar years ~~2003~~2004 through ~~2013~~2014, the amount of water received by Metropolitan from the State Water Project, including water from water transfer, groundwater banking and exchange programs delivered through the California Aqueduct, described below under “—Water Transfer, Storage and Exchange Programs,” varied from a low of ~~908,000~~607,000 acre-feet in calendar year ~~2009~~2014 to a high of 1,800,000 acre-feet in 2004.

~~For calendar year 2012, DWR’s allocation to State Water Project Contractors was 65 percent of contracted amounts which provided 1,242,475 acre-feet of Metropolitan’s 1,911,500 acre-foot contractual amount. In addition, Metropolitan began 2012 with 243,000 acre-feet of carryover supplies from prior years.~~ In calendar year 2013, DWR’s allocation to State Water Project Contractors was 35 percent of contracted amounts, or 669,000 acre-feet of Metropolitan’s 1,911,500 acre-foot contractual amount. In addition, Metropolitan began 2013 with approximately 281,000 acre-feet of carryover supplies from prior years. In calendar year 2014, DWR’s allocation to State Water Project contractors was five percent of contracted amounts, or 95,575 acre-feet of its contractual amount. In addition, Metropolitan used all of its 223,000 acre-feet of carryover supplies from prior years, but was able to carry over 32,000 acre-feet of unused 2014 State Water Project supplies which will be available for use in 2015. See “—Water Transfer, Storage and Exchange Programs” and “—Storage Capacity and Water in Storage” below.

For calendar year ~~2014~~2015, DWR’s initial allocation estimate to State Water Project Contractors was announced on ~~April 18, 2014~~December 1, 2014, as ~~five percent of its 1,911,500 acre-foot contractual amount. Under this allocation, Metropolitan will receive approximately 95,575 acre-feet of contracted amounts. In addition, Metropolitan began 2014 with approximately 223,000 acre-feet of carryover supplies from prior years, all of which can be drawn in 2014. Through September 2014, Metropolitan has used 215,000 acre-feet of these carryover supplies and plans to use all 223,000 acre-feet by the end of the year. Although Metropolitan plans to use all carry over State Water Project Supplies accumulated in years prior to 2014, it is also working to carry over unused 2014 State Water Project supplies into 2015. DWR’s 2014~~10 percent of contracted amounts. Due to December 2014 storm runoff and storage in the State’s major reservoirs, this allocation reflects that calendar year 2013 was increased on January 15, 2015 to 15 percent of contracted amounts or 287,000 acre-feet. This allocation follows the driest year on record infor much of California; in 2013, persisting dry conditions persisted in 2014, low storage levels ~~are low~~ in the State’s major reservoirs; ~~drought conditions occurred in previous years~~, and federally mandated environmental restrictions which have been imposed upon water deliveries from the Bay Delta, including the ~~potential for additional limitations as a result of the currently controlling Delta smelt biological opinion~~opinions as discussed below. As in previous dry years, Metropolitan is augmenting these deliveries using withdrawals from its storage programs along the State Water Project and through water transfer and exchange programs. See “METROPOLITAN’S WATER SUPPLY—Water Transfer, Storage and Exchange Programs” in this Appendix A.

Endangered Species Act Considerations

General. The listing of several fish species as threatened or endangered under the federal or California Endangered Species Acts (respectively, the “Federal ESA” and the “California ESA” and, collectively, the “ESAs”) have adversely impacted State Water Project operations and limited the flexibility of the State Water Project. Currently, five species (the winter-run and spring-run Chinook salmon, Delta smelt, North American green sturgeon and Central Valley steelhead) are listed under the ESAs. In addition,

on June 25, 2009, the California Fish and Game Commission declared the longfin smelt a threatened species under the California ESA.

The Federal ESA requires that before any federal agency authorizes funds or carries out an action it must consult with the appropriate federal fishery agency to determine whether the action would jeopardize the continued existence of any threatened or endangered species, or adversely modify habitat critical to the species' needs. The result of the consultation is known as a "biological opinion." In the biological opinion the federal fishery agency determines whether the action would cause jeopardy to a threatened or endangered species or adverse modification to critical habitat and recommends reasonable and prudent alternatives or measures that would allow the action to proceed without causing jeopardy or adverse modification. The biological opinion also includes an "incidental take statement." The incidental take statement allows the action to go forward even though it will result in some level of "take," including harming or killing some members of the species, incidental to the agency action, provided that the agency action does not jeopardize the continued existence of any threatened or endangered species and complies with reasonable mitigation and minimization measures recommended by the federal fishery agency.

In 2004 and 2005, the United States Fish and Wildlife Service ("USFWS") and National Marine Fisheries Service issued biological opinions and incidental take statements governing the coordinated operations of the State Water Project and the federal Central Valley Project with respect to the Delta smelt, the winter-run and spring-run Chinook salmon and the Central Valley steelhead. In July 2006, the Bureau of Reclamation reinitiated consultation with the USFWS and National Marine Fisheries Service with respect to the 2004 and 2005 biological opinions (with the addition of the North American green sturgeon, which was listed in April 2006) following the filing of legal challenges to those biological opinions and incidental take statements described under "*Federal ESA Litigation*" below. Under the Federal ESA, critical habitat must also be designated for each listed species. Critical habitat has been designated for each of the currently listed species.

Federal ESA Litigation. Litigation filed by several environmental interest groups (*NRDC v. Kempthorne*; and *Pacific Coast Federation of Fishermen's Associations v. Gutierrez*) in the United States District Court for the Eastern District of California alleged that the 2004 and 2005 biological opinions and incidental take statements inadequately analyzed impacts on listed species under the Federal ESA.

Delta Smelt Consolidated Cases. On May 25, 2007, Federal District Judge Wanger issued a decision on summary judgment in *NRDC v. Kempthorne*, finding the USFWS biological opinion for Delta smelt to be invalid. The USFWS released a new biological opinion on the impacts of the State Water Project and Central Valley Project on Delta smelt on December 15, 2008. Metropolitan, the San Luis & Delta Mendota Water Authority, Westlands Water District, Kern County Water Agency, Coalition for a Sustainable Delta and State Water Contractors, a California nonprofit corporation formed by agencies contracting with DWR for water from the State Water Project (the "State Water Contractors"), the Family Farm Alliance and the Pacific Legal Foundation, on behalf of several owners of small farms in California's Central Valley, filed separate lawsuits in federal district court challenging the biological opinion. The federal court consolidated these lawsuits under the caption *Delta Smelt Consolidated Cases*.

On December 14, 2010, Judge Wanger issued a decision on summary judgment finding that there were major scientific and legal flaws in the Delta smelt biological opinion. The court found that some but not all of the restrictions on project operations contained in the 2008 Delta smelt biological opinion were arbitrary, capricious and unlawful. On May 18, 2011, Judge Wanger issued a final amended judgment directing the USFWS to complete a new draft biological opinion by October 1, 2011, and a final biological opinion with environmental documentation by December 1, 2013. Later stipulations and orders changed the October 1, 2011 due date for a draft biological opinion to December 14, 2011, and changed the December 1, 2013 due date for the final biological opinion to December 1, 2014. A draft biological opinion was issued on December 14, 2011. The draft biological opinion deferred specification of a reasonable and prudent

alternative and an incidental take statement pending completion of environmental impact review under the National Environmental Policy Act (“NEPA”). The federal defendants and environmental intervenors appealed the final judgment invalidating the 2008 Delta smelt biological opinion to the U.S. Court of Appeals for the Ninth Circuit. State Water Project and Central Valley Project contractor plaintiffs, including Metropolitan, cross-appealed from the final judgment. Those appeals and cross-appeals were argued on September 10, 2012.

On March 13, 2014, the Ninth Circuit reversed in part and affirmed in part the district court’s decision. The Ninth Circuit reversed those portions of the district court decision which had found the 2008 Delta smelt biological opinion to be arbitrary and capricious, and held, instead, that the 2008 biological opinion was valid and lawful. Metropolitan’s deliveries from the State Water Project were previously restricted under the 2008 biological opinion for a period prior to 2011. One practical result of the Ninth Circuit’s decision is to legally approve the water supply restrictions in the 2008 biological opinion. These water supply restrictions could have a range of impacts on Metropolitan’s deliveries from the State Water Project depending on hydrologic conditions. The Court denied the petitions for rehearing filed by the Department of Water Resources, Metropolitan and other State Water Contractors, and the Federal Water Contractors. On ~~October 6, 2014, the Federal and State Water Contractors filed~~DATE, the Supreme Court denied a petition for ~~a writ of~~ certiorari to review the Ninth Circuit’s decision filed by Federal and State Water Contractors with the U.S. Supreme Court. Any adverse impact of ~~this litigation and~~ ruling on Metropolitan’s State Water Project supplies cannot be determined at this time. See “—State Water Project—General,” above and “—State Water Project Operational Constraints,” below.

Consolidated Salmon Cases. ~~On April 16, 2008, in Pacific Coast Federation of Fishermen’s Associations v. Gutierrez, the court invalidated the 2004 National Marine Fisheries Service’s biological opinion for the salmon and other fish species that spawn in rivers flowing into the Bay-Delta. Among other things, the court found that the no jeopardy conclusions in the biological opinion were inconsistent with some of the factual findings in the biological opinion; that the biological opinion failed to adequately address the impacts of State Water Project and Central Valley Project operations on critical habitat and that there was a failure to consider how climate change and global warming might affect the impacts of the projects on salmonid species.~~ On June 4, 2009, the National Marine Fisheries Service released a ~~new~~ biological opinion for salmonid species ~~to replace the 2004 biological opinion~~. The 2009 salmonid species biological opinion contains additional restrictions on State Water Project and Central Valley Project operations. The National Marine Fisheries Service calculated that these restrictions will reduce the amount of water the State Water Project and Central Valley Project combined will be able to export from the Bay-Delta by five to seven percent. DWR had estimated a 10 percent average water loss under this biological opinion. See “—State Water Project Operational Constraints” below for the estimated impact to Metropolitan’s water supply. Six lawsuits were filed challenging the 2009 salmon biological opinion. These various lawsuits have been brought by the San Luis & Delta Mendota Water Authority, Westlands Water District, Stockton East Water District, Oakdale Irrigation District, Kern County Water Agency, the State Water Contractors and Metropolitan. The court consolidated the cases under the caption *Consolidated Salmon Cases*.

On May 25, 2010, the court granted the plaintiffs’ request for preliminary injunction in the *Consolidated Salmon Cases*, restraining enforcement of two requirements under the salmon biological opinion that limit exported water during the spring months based on San Joaquin River flows into the Bay-Delta and reverse flows on the Old and Middle Rivers. Hearings on motions for summary judgment in the *Consolidated Salmon Cases* were held on December 16, 2010. ~~On September 20, 2011, Judge Wanger issued a decision on summary judgment, finding that the salmon biological opinion was flawed, and that some but not all of the project restrictions in the biological opinion were arbitrary and capricious.~~ ~~On December 12, 2011, Judge O’Neill (who was assigned to this case following Judge Wanger’s retirement)~~On December 12, 2011, the court issued a final judgment ~~in the Consolidated Salmon Cases. The final judgment remands~~remanding the 2009 salmon biological opinion to the National Marine Fisheries Service, and ~~directs that~~directing the agency to issue a new ~~draft~~ salmon biological opinion ~~be issued~~ after completion of

environmental impact review under NEPA. The due date for the draft salmon biological opinion was extended to October 1, 2015, and the due date for the final opinion was extended to February 1, 2017. On January 19, 2012, Judge O’Neill approved a joint stipulation of the parties that specifies how to comply with one of the salmon biological opinion restrictions that applies to water project operations in April and May of 2012. In January and February 2012, the federal defendants and environmental intervenors filed appeals of the final judgment in the *Consolidated Salmon Cases*, and State Water Project and Central Valley Project contractors filed cross-appeals. ~~Those appeals and cross-appeals were argued on September 15, 2014 and the parties are awaiting a decision from the Ninth Circuit. On December 22, 2014, the Ninth Circuit reversed in part and affirmed in part the district court’s decision. The Ninth Circuit reversed those portions of the district court decision which had found the 2009 salmon biological opinion to be arbitrary and capricious, and held, instead, that the 2009 biological opinion was valid and lawful. Any adverse impact of this ruling on Metropolitan’s State Water Project supplies cannot be determined at this time. See “—State Water Project—General,” above and “—State Water Project Operational Constraints,” below.~~

California ESA Litigation. In addition to the litigation under the Federal ESA, other environmental groups sued DWR on October 4, 2006 in the Superior Court of the State of California for Alameda County alleging that DWR was “taking” listed species without authorization under the California ESA. This litigation (*Watershed Enforcers, a project of the California Sportfishing Protection Alliance v. California Department of Water Resources*) requested that DWR be mandated to either cease operation of the State Water Project pumps, which deliver water to the California Aqueduct, in a manner that results in such “taking” of listed species or obtain authorization for such “taking” under the California ESA. On April 18, 2007, the Alameda County Superior Court issued its Statement of Decision finding that DWR was illegally “taking” listed fish through operation of the State Water Project export facilities. The Superior Court ordered DWR to “cease and desist from further operation” of those facilities within 60 days unless it obtained take authorization from the California Department of Fish and Game.

DWR appealed the Alameda County Superior Court’s order on May 7, 2007. This appeal stayed the order pending the outcome of the appeal. The Court of Appeal stayed processing of the appeal in 2009 to allow time for DWR to obtain incidental take authorization for the Delta smelt and salmon under the California ESA, based on the consistency of the federal biological opinions with California ESA requirements (“Consistency Determinations”). After the California Department of Fish & Game issued the Consistency Determinations under the California ESA, authorizing the incidental take of both Delta smelt and salmon, appellants DWR and State Water Contractors dismissed their appeals of the *Watershed Enforcers* decision. The Court of Appeal subsequently issued a decision finding that DWR was a “person” under the California ESA and subject to its take prohibitions, which was the only issue left in the case. The State Water Contractors and Kern County Water Agency have filed suit in state court challenging the Consistency Determinations under the California ESA that have been issued for both Delta smelt and salmon. Those lawsuits challenging the Consistency Determinations have been stayed and are awaiting the final rulings in federal court regarding the validity of the Delta smelt and salmon biological opinions. —See “*Federal ESA Litigation*” above.

~~The California Fish and Game Commission listed the longfin smelt as a threatened species under the California ESA on June 25, 2009. On February 23, 2009, in anticipation of the listing action, the California Department of Fish and Game issued a California ESA section 2081 incidental take permit to DWR authorizing the incidental take of longfin smelt by the State Water Project. This permit authorizes continued operation of the State Water Project under the conditions specified in the section 2081 permit. The State Water Contractors filed suit against the California Department of Fish and Game on March 25, 2009, alleging that the export restrictions imposed by the section 2081 permit have no reasonable relationship to any harm to longfin smelt caused by State Water Project operations, are arbitrary and capricious and are not supported by the best available science. This lawsuit was voluntarily dismissed in 2014 pursuant to a settlement agreement which set up a collaborative multi-year longfin smelt science program to investigate various factors relating to the impacts of water project operations on longfin smelt.~~

State Water Project Operational Constraints. DWR has altered the operations of the State Water Project to accommodate species of fish listed under the ESAs. These changes in project operations have adversely affected State Water Project deliveries. The impact on total State Water Project deliveries attributable to the Delta smelt and salmonid species biological opinions combined is estimated to be one million acre-feet in an average year, reducing State Water Project deliveries from approximately 3.3 million acre-feet to approximately 2.3 million acre-feet for the year under average hydrology, and are estimated to range from 0.3 million acre-feet during critically dry years to 1.3 million acre-feet in above normal water years. State Water Project deliveries to contractors for calendar years 2008 through ~~2012~~2014 were reduced by a total of approximately ~~2.33.0~~ million acre-feet as a result of pumping restrictions. Pumping restrictions impacting the State Water Project allocation for calendar year ~~2013~~—~~have~~2014 reduced exports by approximately ~~596,000~~100,000 acre-feet.

Operational constraints likely will continue until long-term solutions to the problems in the Bay-Delta are identified and implemented. State and federal resource agencies and various environmental and water user entities are currently engaged in the development of the Bay-Delta Conservation Plan, which is aimed at addressing ecosystem needs and securing long-term operating permits for the State Water Project, and includes the Delta Habitat Conservation and Conveyance Program (“DHCCP”) (together, the “BDCP”). The BDCP’s current efforts consist of the preparation of the environmental documentation and preliminary engineering design for Bay-Delta water conveyance and related habitat conservation measures under the BDCP. These programs are discussed further under “—*Bay-Delta Regulatory and Planning Activities*” below.

Other issues, such as the decline of some fish populations in the Bay-Delta and surrounding regions and certain operational actions in the Bay-Delta, may significantly reduce Metropolitan’s water supply from the Bay-Delta. State Water Project operational requirements may be further modified under new biological opinions for listed species under the Federal ESA or by the California Department of Fish and Game’s issuance of incidental take authorizations under the California ESA. Biological opinions or incidental take authorizations under the Federal ESA and California ESA might further adversely affect State Water Project and Central Valley Project operations. Additionally, new litigation, listings of additional species or new regulatory requirements could further adversely affect State Water Project operations in the future by requiring additional export reductions, releases of additional water from storage or other operational changes impacting water supply operations. Metropolitan cannot predict the ultimate outcome of any of the litigation or regulatory processes described above but believes they could have a materially adverse impact on the operation of State Water Project pumps, Metropolitan’s State Water Project supplies and Metropolitan’s water reserves.

Bay-Delta Regulatory and Planning Activities. The State Water Resources Control Board (“SWRCB”) is the agency responsible for setting water quality standards and administering water rights throughout California. Decisions of the SWRCB can affect the availability of water to Metropolitan and other users of State Water Project water. The SWRCB exercises its regulatory authority over the Bay-Delta by means of public proceedings leading to regulations and decisions. These include the Bay-Delta Water Quality Control Plan (“WQCP”), which establishes the water quality objectives and proposed flow regime of the estuary, and water rights decisions, which assign responsibility for implementing the objectives of the WQCP to users throughout the system by adjusting their respective water rights. The SWRCB is required by law to periodically review its WQCP to ensure that it meets the changing needs of this complex system.

Since 2000, SWRCB’s Water Rights Decision 1641 (“D-1641”) has governed the State Water Project’s ability to export water from the Bay-Delta for delivery to Metropolitan and other agencies receiving water from the State Water Project. D-1641 allocated responsibility for meeting flow requirements and salinity and other water quality objectives established earlier by the WQCP. The SWRCB also identified additional issues to review, which could result in future changes in water quality objectives and flows that could affect exports of water from the State Water Project. Currently, the SWRCB is reviewing salinity

objectives in the Bay-Delta intended to protect Bay-Delta farming and inflow requirements upstream of the Delta to protect aquatic species. DWR and the Bureau of Reclamation filed a petition on January 29, 2014, requesting changes to D-1641 terms that govern outflows in the Bay-Delta. The SWRCB approved temporary urgency changes in the required outflows into the Bay-Delta on January 31, 2014, enabling water to be conserved in reservoirs in case of continued drought. The temporary urgency changes also permit flexible operation of gates that typically remain closed during the late winter and spring to protect fish. Instead, gates may be operated based on evolving water quality conditions and fish migration information, which will enable greater protection against salt water intrusion to the interior portion of the Bay-Delta while protecting fish populations.

Bay -Delta Planning Activities. In 2000, several State and federal agencies released the CALFED Bay Delta Programmatic Record of Decision (“ROD”) and Environmental Impact Report/Environmental Impact Statement (“EIR/EIS”) that outlined a 30-year plan to improve the Delta’s ecosystem, water supply reliability, water quality, and levee stability. The CALFED ROD remains in effect and many of the state, federal, and local projects begun under CALFED continue. However, implementation is now coordinated through the Delta Stewardship Council.

Building on CALFED and other Bay-Delta planning activities, in 2006 multiple State and federal resource agencies, water agencies, and other stakeholder groups entered into a planning agreement for the Bay-Delta Conservation Plan (“BDCP”). The BDCP is being developed as a comprehensive conservation strategy for the Bay-Delta designed to restore and protect ecosystem health, water supply, and water quality within a stable regulatory framework. The BDCP would result in long-term permits from regulatory agencies in return for meeting the Bay-Delta’s ecological needs. Implementation of the BDCP would occur over a 50-year time frame. The BDCP is intended to create a durable regulatory framework that would allow for fundamental and systematic improvements to water supply reliability and the Bay-Delta’s ecosystem health.

The draft BDCP, draft [BDCP](#) Environmental Impact Report/Environmental Impact Statement (EIR/EIS) and draft Implementing Agreement were made available for public review and comment in December 2013. A supplemental draft EIR/EIS is currently being prepared and will be released for public review in spring 2015.

The Sacramento-San Joaquin Delta Reform Act (“Reform Act”), passed in 2009, made it state policy to manage the Delta in support of the coequal goals of water supply reliability and ecosystem restoration in a manner that acknowledges the evolving nature of the Bay-Delta as a place for people and communities. The Reform Act created the Delta Stewardship Council and empowered it to develop a comprehensive management plan (the “Delta Plan”). State and local agencies proposing certain actions or projects in the Bay-Delta are required to certify for the Delta Stewardship Council that those efforts are consistent with the Delta Plan. The BDCP is intended to be incorporated into the Delta Plan once environmental approvals and requirements are met.

On May 24, 2013, the San Luis & Delta-Mendota Water Authority and Westlands Water District filed litigation in Sacramento Superior Court challenging the adequacy of the Program EIR under CEQA, and alleged that the Delta Plan is invalid because, among other things, it is inconsistent with the Delta Reform Act of 2009. On June 14, 2013, several different actions were filed challenging the adequacy of the Program EIR under CEQA and alleging that the Delta Plan is invalid. The State Water Contractors, Metropolitan, Alameda County Flood Control and Water Conservation District, Zone 7, Santa Clara Valley Water District, Antelope Valley-East Kern Water Agency, and San Bernardino Valley Municipal Water District filed in Sacramento Superior Court; several environmental interest groups, as well as several fishing industry groups and the Winnemem Wintu Tribe filed in San Francisco Superior Court; and the City of Stockton filed in San Joaquin County Superior Court. On June 17, 2013, Save the California Delta Alliance, as well as the Central Delta Water Agency, South Delta Water Agency, Local Agencies of the North Delta, and others filed in San Francisco Superior Court. The impact, if any, that such litigation might have on Metropolitan’s State Water

Project supplies cannot be determined at this time. In September 2013, the seven cases were coordinated in Sacramento Superior Court as the Delta Stewardship Council Cases. In March 2014, the court set a schedule for lodging of the administrative record and other pre-trial motions. The case management conference was held on July 18, 2014. All briefs must be filed by May 21, 2015. No trial date has been set.

On July 25, 2012, Governor Jerry Brown and Secretary of the Interior Ken Salazar announced key proposed elements to advance the BDCP planning process, including north Bay-Delta water diversion facilities with a total capacity of 9,000 cubic-feet per second (“cfs”), two tunnels sized to minimize energy use during operations and a “decision tree” process for unresolved operation criteria such as fall and spring outflows. Preliminary cost estimates for the conveyance portion of this project alternative are approximately \$14 billion. When a decision selecting the final project has been made, costs will be updated and allocated. Metropolitan anticipates that it could bear approximately 25 percent of the costs of the conveyance portion of the project.

Public review drafts of both the BDCP and the BDCP EIR/EIS were released on December 9, 2013. However, due in part to the extensive comments received, on August 27, 2014, DWR and the other state and federal agencies leading the BDCP announced that a Recirculated Draft BDCP, EIR/EIS, and Implementing Agreement will be prepared and released in early 2015. The final planning documents are expected to be completed in the fall of 2015. The planning, environmental documentation and preliminary engineering design for the BDCP are being prepared pursuant to the Delta Habitat Conservation and Conveyance Program Memorandum of Agreement (“MOA”) and are also scheduled to be completed in 2015. The parties to the MOA are DWR, the Bureau of Reclamation, the State and Federal Contractors Water Agency, Metropolitan, Kern County Water Agency, State Water Contractors, San Luis & Delta Mendota Water Authority, Westlands Water District and Santa Clara Valley Water District.

Water Bond. ~~On August 13, 2014, the Legislature authorized a~~ The \$7.12 billion ~~water bond measure, replacing the previous water bond authorized in 2009. The~~ bond measure, Proposition ~~11~~, was approved by voters on November 4, 2014. Proposition 1 also enacted the Water Quality, Supply, and Infrastructure Improvement Act of 2014. Metropolitan is not able to assess at this time the impact that the water bond measure or the Water Quality, Supply, and Infrastructure Improvement Act of 2014 may have on Metropolitan.

~~*Sacramento Regional County Sanitation District Litigation.* Metropolitan, along with other State and federal water contractors, has urged action to address water quality concerns with respect to both the aquatic health of the Bay-Delta and drinking water quality. On December 9, 2010, the Central Valley Regional Water Quality Control Board (“Regional Board”) approved a National Pollutant Discharge Elimination System (“NPDES”) permit for the Sacramento Regional County Sanitation District (“Sanitation District”) setting water quality based requirements for the Sanitation District’s wastewater treatment plant that will require advanced treatment upgrades for the Sanitation District’s wastewater facility. The Sanitation District’s treatment plant is the largest wastewater discharger into the Bay-Delta. The treatment plant provides only a secondary level of treatment and discharges nutrients, pathogens, and total organic carbon into the Bay-Delta water supply. The treatment plant’s discharge of nitrogen, particularly ammonia, has been shown to be altering the food chain in the estuary to the detriment of Delta smelt and other native species. The NPDES permit calls for a significant reduction of the nitrogen and particularly ammonia discharge which will require full nitrification and denitrification treatment by 2020, as well as tertiary filtration treatment to meet pathogen removal requirements. The NPDES permit also includes additional permit limits and monitoring requirements for other water quality constituents, including toxic contaminants.~~

~~The Sanitation District petitioned the SWRCB for review of the NPDES permit. SWRCB adopted a final order at a December 4, 2012 hearing, which concluded the administrative appeal process. The SWRCB’s final order rejected the Sanitation District’s arguments, upheld the substantive requirements of the NPDES permit and imposed new, more stringent water quality limits.~~

~~While the administrative appeal before the SWRCB was still pending, on December 30, 2011, the Sanitation District filed a lawsuit in Sacramento Superior Court against the Regional Board and SWRCB seeking to overturn and relax the NPDES permit requirements. Metropolitan and other water agencies that participated in the NPDES permitting process intervened. On April 29, 2013, in a partial settlement of the litigation, the Sanitation District agreed to drop its challenge of the NPDES permit requirements for ammonia and nitrate removal. As part of the settlement, the Sanitation District will comply with a set of milestones resulting in completion of the construction of treatment facilities necessary for full nitrification and denitrification by 2021. In early 2014, the parties reached a settlement on the filtration requirements. The settlement still requires the Sanitation District to implement filtration, but at a lower hydraulic capacity than originally required.~~

~~Implementation of the final settlement of the permit litigation required the Central Valley Regional Water Quality Control Board (the "Regional Board") to issue an amended permit. Following publication of a draft permit, the Regional Board adopted the amended permit on August 8, 2014. In September 2014, the parties to the litigation filed the necessary papers with the court to dismiss the case. Final judgment was entered October 8, 2014 concluding this litigation.~~

~~In a related proceeding, in 2005, Metropolitan, other urban State Water Contractor agencies and the Contra Costa Water District brought a successful CEQA challenge in response to significant, unmitigated water quality impacts that would occur from a planned expansion of the Sanitation District's treatment plant. The Sanitation District appealed the trial court ruling. In January 2013, the Court of Appeal dismissed the appeal as moot, based on the Sanitation District's representation that the expansion project is no longer planned. That left attorneys' fees for Metropolitan and the other prevailing parties as the only remaining issue in this CEQA case. In September 2014, the parties to the CEQA case reached agreement to settle the attorney fee issue. The settlement calls for the Sanitation District to accelerate completion of a planned treatment component in order to begin nutrient removal two years ahead of the permit compliance date.~~

California Water Impact Network Litigation. On September 3, 2010, the California Water Impact Network and two other non-profit organizations filed a petition for writ of mandate and for declaratory and injunctive relief in Sacramento Superior Court against the SWRCB and DWR. The petition alleges that by permitting and carrying out the export of large volumes of water from the Delta through the State Water Project, the SWRCB and DWR have failed to protect public trust fishery resources in the Delta; have been diverting water from the Bay-Delta wastefully and unreasonably in violation of the prohibition against waste and unreasonable use in the California Constitution; and have failed to enforce and comply with water quality and beneficial use standards in D-1641, the 1995 SWRCB Water Quality Control Plan, and the Porter-Cologne Act. Among the relief sought in the petition is an injunction against Bay-Delta exports by the State Water Project pending compliance with the various laws and administrative orders that are alleged to have been violated. The State Water Contractors filed a motion to intervene in this action, which was granted on March 25, 2011. The court has ordered the plaintiffs to include the Bureau of Reclamation as a party. In response, the Bureau of Reclamation has asserted that federal sovereign immunity bars their inclusion in the state court action. If the court determines that the Bureau of Reclamation is an indispensable party, the lawsuit, or portions of it, may be dismissed.

Monterey Agreement Litigation. On September 15, 2000, the Third District Court of Appeal for the State of California issued its decision in *Planning and Conservation League; Citizens Planning Association of Santa Barbara County and Plumas County Flood Control District v. California Department of Water Resources and Central Coast Water Authority*. This case was an appeal of a challenge to the adequacy of the environmental documentation prepared with respect to certain amendments to the State Water Contract (the "Monterey Agreement") which reflects the settlement of certain disputes regarding the allocation of State Water Project water. The Court of Appeal held that the environmental documentation was defective in failing to analyze the environmental effects of the Monterey Agreement's elimination of the permanent shortage provisions of the State Water Contract. The parties negotiated a settlement agreement in the fall of

2002, which allows continued operation of the State Water Project under the Monterey Agreement principles while a new EIR was prepared. On May 4, 2010, DWR completed the final EIR and concluded the remedial CEQA review for the Monterey Agreement ~~on May 4, 2010, which reflects the settlement of certain disputes regarding the allocation of State Water Project water.~~ Following DWR's completion of the EIR, three ~~new~~ lawsuits were filed challenging the project. Central Delta Water Agency, South Delta Water Agency, California Water Impact Network, California Sportfishing Protection Alliance, and the Center For Biological Diversity filed a lawsuit against DWR in Sacramento County Superior Court challenging the validity of the EIR under CEQA and the validity of underlying agreements under a reverse validation action (the "*Central Delta I*" case). These same plaintiffs filed a reverse validation lawsuit against the Kern County Water Agency in Kern County Superior Court ("*Central Delta II*"). This lawsuit targets a transfer of land from Kern County Water Agency to the Kern Water Bank, which was completed as part of the original Monterey Agreement. The third lawsuit is an EIR challenge brought by Rosedale-Rio Bravo Water Storage District and Buena Vista Water Storage District against DWR in Kern County Superior Court ("*Rosedale*"). The two Kern County cases were transferred to Sacramento Superior Court and the three cases were consolidated for trial. The *Central Delta II* case was stayed pending resolution of the *Central Delta I* case.

In January 2013, the Court ruled that the validation cause of action in *Central Delta I* was time barred by the statute of limitations. On March 5, 2014 the Court issued its decisions on the EIR challenges in *Central Delta I* and *Rosedale*. The Court granted the petitions for writ of mandate, holding that DWR violated CEQA because the EIR failed to adequately describe, analyze, and mitigate the potential impacts associated with the Kern Water Bank. On October 2, 2014, the court issued its final rulings in *Central Delta I* and *Rosedale*, holding that DWR must complete a limited scope remedial CEQA review addressing the potential impacts of the Kern Water Bank. ~~However, the court's ruling~~ also allows operation of the State Water Project to continue under the terms of the Monterey Agreement while the remedial CEQA review is prepared. ~~And importantly, the ruling and~~ leaves in place the underlying project approvals while DWR prepares the remedial CEQA review.

~~The final step for these cases in the trial court is entry of judgment and a writ ordering DWR to decertify the current EIR and prepare the remedial review. Any appeal must be filed 60 days after the entry of judgment. Upon entry of judgment in Central Delta I, the stay will lift in Central Delta II and it is anticipated that the court will then establish a schedule for resolving the Central Delta II case.~~ plaintiffs have appealed the decision. Any adverse impact of this litigation and ruling on Metropolitan's State Water Project supplies cannot be determined at this time.

Colorado River Aqueduct

General. The Colorado River was Metropolitan's original source of water after Metropolitan's establishment in 1928. Metropolitan has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. Water from the Colorado River and its tributaries is also available to other users in California, as well as users in the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming (the "Colorado River Basin States"), resulting in both competition and the need for cooperation among these holders of Colorado River entitlements. In addition, under a 1944 treaty, Mexico has an allotment of 1.5 million acre-feet of Colorado River water annually except in the event of extraordinary drought or serious accident to the delivery system in the United States, in which event the water allotted to Mexico would be curtailed. Mexico also can schedule delivery of an additional 200,000 acre-feet of Colorado River water per year if water is available in excess of the requirements in the United States and the 1.5 million acre-feet allotted to Mexico.

The Colorado River Aqueduct, which is owned and operated by Metropolitan, transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County. After deducting for conveyance losses and considering maintenance requirements, up to 1.25 million acre-feet of

water a year may be conveyed through the Colorado River Aqueduct to Metropolitan's member agencies, subject to availability of Colorado River water for delivery to Metropolitan as described below.

California is apportioned the use of 4.4 million acre-feet of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California and Nevada. In addition, California has historically been allowed to use Colorado River water apportioned to but not used by Arizona or Nevada when such supplies have been requested for use in California. Under the 1931 priority system that has formed the basis for the distribution of Colorado River water made available to California, Metropolitan holds the fourth priority right to 550,000 acre-feet per year. This is the last priority within California's basic apportionment. In addition, Metropolitan holds the fifth priority right to 662,000 acre-feet of water, which is in excess of California's basic apportionment. See the table "PRIORITIES UNDER THE 1931 CALIFORNIA SEVEN-PARTY AGREEMENT" below. Until 2003, Metropolitan had been able to take full advantage of its fifth priority right as a result of the availability of surplus water and apportioned but unused water. However, during the 1990s Arizona and Nevada increased their use of water from the Colorado River, utilizing their respective basic apportionments by 2002 and significantly reducing unused apportionment available for California. In addition, a severe drought in the Colorado River Basin reduced storage in system reservoirs, such that Metropolitan stopped taking surplus deliveries in 2003 in an effort to mitigate the effects of the drought. Prior to 2003, Metropolitan could divert over 1.2 million acre-feet in any year, but since that time, Metropolitan's net diversions of Colorado River water have ranged from a low of nearly 633,000 acre-feet in 2006 to a high of ~~1,105,232~~1,176,000 acre-feet in ~~2009~~2014. Average annual net deliveries for ~~2003~~2004 through ~~2013~~2014 were approximately ~~838,000~~883,000 acre-feet, with annual volumes dependent primarily on programs to augment supplies, including transfers of conserved water from agriculture. ~~Metropolitan's Colorado River supply was 1,012,715 acre-feet in 2013.~~—See "*Quantification Settlement Agreement*" and "*Interim Surplus Guidelines*" below.

~~[Remainder of page intentionally left blank.]~~

PRIORITIES UNDER THE 1931 CALIFORNIA SEVEN-PARTY AGREEMENT⁽¹⁾

Priority	Description	Acre-Feet Annually
1	Palo Verde Irrigation District gross area of 104,500 acres of land in the Palo Verde Valley	
2	Yuma Project in California not exceeding a gross area of 25,000 acres in California	3,850,000
3(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys ⁽²⁾ to be served by All-American Canal	
3(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	
4	Metropolitan Water District of Southern California for use on the coastal plain	550,000
	SUBTOTAL	4,400,000
5(a)	Metropolitan Water District of Southern California for use on the coastal plain	550,000
5(b)	Metropolitan Water District of Southern California for use on the coastal plain ⁽³⁾	112,000
6(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys to be served by the All-American Canal	300,000
6(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	
	TOTAL	5,362,000
7	Agricultural use in the Colorado River Basin in California	Remaining surplus

Source: *Metropolitan*.

- (1) Agreement dated August 18, 1931, among Palo Verde Irrigation District, Imperial Irrigation District, Coachella Valley County Water District, Metropolitan, the City of Los Angeles, the City of San Diego and the County of San Diego. These priorities were memorialized in the agencies' respective water delivery contracts with the Secretary of the Interior.
- (2) The Coachella Valley Water District serves Coachella Valley.
- (3) In 1946, the City of San Diego, the San Diego County Water Authority, Metropolitan and the Secretary of the Interior entered into a contract that merged and added the City and County of San Diego's rights to storage and delivery of Colorado River water to the rights of Metropolitan.

Metropolitan has taken steps to augment its share of Colorado River water through agreements with other agencies that have rights to use such water. Under a 1988 water conservation agreement (the "1988 Conservation Agreement") between Metropolitan and the Imperial Irrigation District ("IID"), Metropolitan provided funding for IID to construct and operate a number of conservation projects that ~~are currently conserving~~ have conserved up to 105,000 acre-feet of water per year that is provided to Metropolitan. Under the October 2003 Quantification Settlement Agreement and related agreements, Metropolitan, at the request of Coachella Valley Water District ("CVWD"), forgoes up to 20,000 acre-feet of this water each year for diversion by CVWD. See "Quantification Settlement Agreement" below. In ~~2012~~ 2013 and ~~2013~~ 2014, CVWD's requests were for ~~10,463 and~~ 6,693 and an estimated 19,812 acre-feet respectively, leaving ~~93,677 acre-feet in 2012 and~~ 98,307 acre-feet in 2013 and an estimated 84,288 acre-feet for Metropolitan. In 1992,

Metropolitan entered into an agreement with the Central Arizona Water Conservation District (“CAWCD”) to demonstrate the feasibility of CAWCD storing Colorado River water in central Arizona for the benefit of an entity outside of the State of Arizona. Pursuant to this agreement, CAWCD created 80,909 acre-feet of long-term storage credits that, under the agreement as amended, were recovered and delivered to Metropolitan between 2007 and 2010.

Metropolitan and the Palo Verde Irrigation District (“PVID”) signed the program agreement for a Land Management, Crop Rotation and Water Supply Program in August 2004. This program provides up to 133,000 acre-feet of water to be available to Metropolitan in certain years. The term of the program is 35 years. Fallowing began on January 1, 2005. In March 2009, Metropolitan and PVID entered into a supplemental fallowing program within PVID that provided for the fallowing of additional acreage in 2009 and 2010. In calendar years 2009 and 2010, respectively, 24,100 acre-feet and 32,300 acre-feet of water were saved and made available to Metropolitan under the supplemental program. The following table shows annual volumes of water saved and made available to Metropolitan:

WATER AVAILABLE FROM PVID LAND MANAGEMENT, CROP ROTATION AND WATER SUPPLY PROGRAM

<u>Calendar Year</u>	<u>Volume (acre-feet)</u>
2005	108,700
2006	105,000
2007	72,300
2008	94,300
2009*	144,300
2010*	148,600
2011	122,200
2012	73,700
2013	32,750

Source: Metropolitan.

* Includes water from the supplemental fallowing program that provided for fallowing of additional acreage in 2009 and 2010.

In May 2008, Metropolitan provided \$28.7 million to join the CAWCD and the Southern Nevada Water Authority (“SNWA”) in funding the Bureau of Reclamation’s construction of an 8,000 acre-foot off-stream regulating reservoir near Drop 2 of the All-American Canal in Imperial County (officially renamed the Warren H. Brock Reservoir). Construction was completed in October ~~2010~~ 2010 and the Bureau of Reclamation refunded \$2.64 million in unused contingency funds to Metropolitan. The Warren H. Brock Reservoir conserves about 70,000 acre-feet of water per year by capturing and storing otherwise non-storable water flow. ~~The Bureau of Reclamation has refunded to Metropolitan \$2.64 million in unused contingency funds.~~ In return for its funding, Metropolitan received 100,000 acre-feet of water that was stored in Lake Mead, ~~with~~ and has the ability to deliver up to ~~40,000~~ 25,000 acre-feet of ~~the water which has not yet been used~~ in any ~~one~~ single year. Besides the additional water supply, the new reservoir adds to the flexibility of Colorado River operations. As of January 1, 2014, Metropolitan had received 34,000 acre-feet of this water, and had 66,000 acre-feet remaining.

In September 2009, Metropolitan authorized participation with SNWA, the Colorado River Commission of Nevada, the CAWCD and the Bureau of Reclamation in the pilot operation of the Yuma Desalting Plant. The Bureau of Reclamation concluded the pilot operation of the Yuma Desalting Plant in March 2011. Metropolitan’s contribution for the funding agreement was \$8,395,313, of which \$1,087,687 was refunded to Metropolitan. Metropolitan’s yield from the pilot run of the project was 24,397 acre-feet.

In November 2012, Metropolitan executed agreements in support of a program to augment Metropolitan's Colorado River supply from 2013 through 2017 through an international pilot project in Mexico. Metropolitan's total share of costs will be \$5 million for 47,500 acre-feet of project supplies. The costs will be paid between ~~2014~~2015 and 2017, and the conserved water will be credited to Metropolitan's intentionally-created surplus water account no later than 2017. See "*— Intentionally-Created Surplus Program*" below. In December 2013, Metropolitan and IID executed an agreement under which IID will pay half of Metropolitan's program costs, or \$2.5 million, in return for half of the project supplies, or 23,750 acre-feet.

Quantification Settlement Agreement. The Quantification Settlement Agreement ("QSA"), executed by CVWD, IID and Metropolitan in October 2003, establishes Colorado River water use limits for IID and CVWD, provides for specific acquisitions of conserved water and water supply arrangements for up to 75 years, and restored the opportunity for Metropolitan to receive any "special surplus water" under the Interim Surplus Guidelines. See "*—Interim Surplus Guidelines*" below. The QSA also allows Metropolitan to enter into other cooperative Colorado River supply programs. Related agreements modify existing conservation and cooperative water supply agreements consistent with the QSA, and set aside several disputes among California's Colorado River water agencies.

Specific programs under the QSA include lining portions of the All-American and Coachella Canals, which conserve approximately 96,000 acre-feet annually. As a result, about 80,000 acre-feet of conserved water is delivered to the San Diego County Water Authority ("SDCWA") by exchange with Metropolitan. Metropolitan also takes delivery of 16,000 acre-feet annually that will be made available for the benefit of the La Jolla, Pala, Pauma, Rincon and San Pasqual Bands of Mission Indians, the San Luis Rey River Indian Water Authority, the City of Escondido and the Vista Irrigation District, upon completion of a water rights settlement. An amendment to the 1988 Conservation Agreement between Metropolitan and IID and an associated 1989 Approval Agreement among Metropolitan, IID, CVWD and PVID, extended the term of the 1988 Conservation Agreement and limited the single year amount of water used by CVWD to 20,000 acre-feet. Also included under the QSA is the Delivery and Exchange Agreement between Metropolitan and CVWD that provides for Metropolitan to deliver annually up to 35,000 acre-feet of Metropolitan's State Water Project contractual water to CVWD by exchange with Metropolitan's available Colorado River supplies. In calendar year 2011, under a supplemental agreement with CVWD, Metropolitan delivered 105,000 acre-feet, which consisted of the full 35,000 acre-feet for 2011 plus advance delivery of the full contractual amounts for 2012 and 2013. In 2013, Metropolitan entered into a second supplemental agreement with CVWD. Under this agreement, Metropolitan delivered to CVWD 2,508 acre-feet of water in 2013 that would otherwise have been available in 2014. In return, CVWD reduced its 2012 Colorado River water order by 9,537 acre-feet and allowed Metropolitan to use that water conserved by IID. In 2021, the transfer of water conserved annually by IID to SDCWA is expected to reach 205,000 acre-feet. See description below under the caption "*—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*"; see also "METROPOLITAN REVENUES—Principal Customers" in this Appendix A. With full implementation of the programs identified in the QSA, at times when California is limited to its basic apportionment of 4.4 million acre-feet per year, Metropolitan expects to be able to annually divert to its service area approximately 850,000 acre-feet of Colorado River water plus water from other water augmentation programs it develops, including the PVID program, which provides up to approximately 130,000 acre-feet of water per year. (Amounts of Colorado River water received by Metropolitan in ~~2003~~2004 through ~~2013~~2014 are discussed under the heading "*—Colorado River Aqueduct—General*" above.)

A complicating factor in completing the QSA was the fate of the Salton Sea, an important habitat for a wide variety of fish-eating birds as a stopover spot along the Pacific flyway. Some of these birds are listed as threatened or endangered species under the California and Federal ESAs. Located at the lowest elevations of an inland basin and fed primarily by agricultural drainage with no outflows other than evaporation, the Salton Sea is trending towards hyper-salinity, which has already impacted the Salton Sea's fishery. Without

mitigation, the transfer of water from IID to SDCWA, one of the core programs implemented under the QSA, would reduce the volume of agricultural drainage from IID's service area into the Salton Sea, which in turn would accelerate this natural trend of the Salton Sea to hyper-salinity. See "*—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*" below. In passing legislation to implement the QSA, the Legislature committed the State to undertake restoration of the Salton Sea ecosystem. Restoration of the Salton Sea is subject to selection and approval of an alternative by the Legislature and funding of the associated capital improvements and operating costs. The Secretary for the California Natural Resources Agency submitted an \$8.9-billion preferred alternative for restoration of the Salton Sea to the Legislature in May 2007. While withholding authorization of the preferred alternative, the Legislature has appropriated funds from Proposition 84 to undertake demonstration projects and investigations called for in the Secretary's recommendation. On September 25, 2010, then-Governor Schwarzenegger signed Senate Bill 51, establishing the "Salton Sea Restoration Council" as a state agency in the Natural Resources Agency to oversee restoration of the Salton Sea. The council was directed to evaluate alternative Salton Sea restoration plans and to report to the Governor and the Legislature by June 30, 2013 with a recommended plan. However, Governor Brown's 2012 Reorganization Plan, as modified by budget trailer bill SB 1018 (Leno), Chapter 39, Statutes of 2012, effective December 31, 2012, eliminated the council before it ever met. The QSA implementing legislation also established the Salton Sea Restoration Fund, to be funded in part by payments made by the parties to the QSA and fees on certain water transfers among the parties to the QSA. Under the QSA agreements Metropolitan agreed to pay \$20 per acre-foot into the Salton Sea Restoration Fund for any special surplus Colorado River water that Metropolitan elects to take under the Interim Surplus Guidelines, if available. Metropolitan also agreed to acquire up to 1.6 million acre-feet of water conserved by IID, excluding water transferred from IID to SDCWA (see "*—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*" below), if such water can be transferred consistent with plans for Salton Sea restoration, at an acquisition price of \$250 per acre-foot (in 2003 dollars), with net proceeds to be deposited into the Salton Sea Restoration Fund. No conserved water has been made available to Metropolitan under this program. As part of an effort to mitigate the effects of the drought in the Colorado River Basin that began in 2000, Metropolitan elected not to take delivery of special surplus Colorado River water that was available from October 2003 through 2004 and from 2006 through 2007. No special surplus water has been available since 2007. Metropolitan may receive credit for the special surplus water payments against future contributions for the Lower Colorado River Multi-Species Conservation Program (see "*—Environmental Considerations*" below). In consideration of these agreements, Metropolitan will not have or incur any liability for restoration of the Salton Sea.

Sale of Water by the Imperial Irrigation District to San Diego County Water Authority. On April 29, 1998, SDCWA and IID executed an agreement (the "Transfer Agreement") for SDCWA's purchase from IID of Colorado River water that is conserved within IID. An amended Transfer Agreement, executed as one of the QSA agreements, set the maximum transfer amount at 205,000 acre-feet in 2021, with the transfer gradually ramping up to that amount over an approximately twenty-year period, stabilizing at 200,000 acre-feet per year beginning in 2023.

No facilities exist to deliver water directly from IID to SDCWA. Accordingly, Metropolitan and SDCWA entered into an exchange contract, pursuant to which SDCWA makes available to Metropolitan at its intake at Lake Havasu on the Colorado River the conserved Colorado River water acquired by SDCWA from IID and water allocated to SDCWA that has been conserved as a result of the lining of the All-American and Coachella Canals. See "*—Quantification Settlement Agreement*" above. Metropolitan delivers an equal volume of water from its own sources of supply through portions of its delivery system to SDCWA. The deliveries to both Metropolitan and SDCWA are deemed to be made in equal monthly increments. In consideration for the conserved water made available to Metropolitan by SDCWA, a lower rate is paid by SDCWA for the exchange water delivered by Metropolitan. The price payable by SDCWA is calculated using the charges set by Metropolitan's Board from time to time to be paid by its member agencies for the conveyance of water through Metropolitan's facilities. See "METROPOLITAN REVENUES—Wheeling and Exchange Charges" and "—Litigation Challenging Rate Structure" in this

Appendix A for a description of Metropolitan's charges for the conveyance of water through Metropolitan's facilities and litigation in which SDCWA and IID are challenging such charges. In 2011, 143,243 acre-feet were delivered by SDCWA for exchange, consisting of 63,278 acre-feet of IID conservation plus 79,965 acre-feet of conserved water from the Coachella Canal and All-American Canal lining projects. In 2012, 186,861 acre-feet were delivered by SDCWA for exchange, consisting of 106,722 acre-feet of IID conservation plus 80,139 acre-feet of conserved water from the Coachella Canal and All-American Canal lining projects. In 2013, 180,256 acre-feet were delivered by SDCWA for exchange, consisting of 100,000 acre-feet of IID conservation plus 80,256 acre-feet of conserved water from the Coachella Canal and All-American Canal lining projects. In 2014, 179,993 acre-feet were delivered by SDCWA for exchange, consisting of 100,000 acre-feet of IID conservation plus 79,993 acre-feet of conserved water from the Coachella Canal and All-American Canal lining projects.

~~The QSA agreements provided for delivery of 80,000 acre-feet of water conserved by IID in 2011. The delivery of conserved water fell short by 16,722 acre feet. In accordance with the terms of the exchange contract, Metropolitan served SDCWA with a Notice of Default. The exchange contract provides that SDCWA will pay the lower water rate based on deliveries of exchange water that match the volume of conserved water made available by IID in each calendar year. Metropolitan invoiced SDCWA for its higher water rate on the 16,722 acre-feet of additional non-exchange water delivered in 2011. SDCWA paid this invoice under protest. Metropolitan agreed to exchange with SDCWA up to an additional 16,722 acre feet in 2012 if IID delivered that volume of conserved water after meeting its 2012 obligation of 90,000 acre feet. IID was able to obtain and deliver the additional 16,722 acre feet by reducing its use of Colorado River water and Metropolitan credited back to SDCWA the amount paid under protest.~~

~~QSA Related Litigation—State Court.~~ On November 5, 2003, IID filed a validation action in Imperial County Superior Court, seeking a judicial determination that thirteen agreements associated with the IID/SDCWA water transfer and the QSA are valid, legal and binding. Other lawsuits also were filed contemporaneously challenging the execution, approval and implementation of the QSA on various grounds. All of the QSA cases were coordinated in Sacramento Superior Court. Between early 2004 and late 2009, a number of pre-trial challenges and dispositive motions were filed by the parties and ruled on by the court, which reduced the number of active cases and narrowed the issues for trial, the first phase of which began on November 9, 2009 and concluded on December 2, 2009. One of the key issues in this first phase was the constitutionality of the QSA Joint Powers Agreement, pursuant to which IID, CVWD and SDCWA agreed to commit \$163 million toward certain mitigation and restoration costs associated with implementation of the QSA and related agreements, and the State agreed to be responsible for any costs exceeding this amount. A final judgment was issued on February 11, 2010, in which the trial court held that the State's commitment was unconditional in nature and, as such, violated the appropriation requirement and debt limitation under the California Constitution. The trial court also invalidated eleven other agreements, including the QSA, because they were inextricably interrelated with the QSA Joint Powers Agreement. Lastly, the trial court ruled that all other claims raised by the parties, including CEQA claims related to the QSA Programmatic EIR and the IID Transfer Project EIR, are moot.

In March 2010, Metropolitan, IID, CVWD, SDCWA, the State and others filed notices of appeal challenging various aspects of the trial court's ruling. On December 7, 2011, the court of appeal issued its ruling reversing, in part, the trial court's ruling. In particular, the court of appeal held that while the State's commitment to fund mitigation costs in excess of \$163 million was unconditional, actual payment of such costs was subject to a valid appropriation by the Legislature, as required under the California Constitution. Moreover, the State's commitment did not create a present debt in excess of the State Constitution's \$300,000 debt limit. Thus, the QSA Joint Powers Agreement was held to be constitutional. The court of appeal also rejected other challenges to this agreement, including that it was beyond the State's authority, there was no "meeting of the minds," and there was a conflict of interest. In light of its ruling, the court of appeal remanded the matter back to the trial court for further proceedings on the claims that had been previously dismissed as moot. A two-day bench trial was held on November 13, 2012. On June 4, 2013 the

trial court issued its ruling, holding that IID had acted within its authority in executing these agreements and had complied with all substantive and procedural requirements imposed under State law. In addition, the court held that the environmental reviews conducted in support of the QSA and related agreements complied with CEQA and its implementing regulations in all respects. In short, the trial court rejected all of the claims asserted by opponents of the QSA. Parties challenging the QSA appealed and agencies supporting the QSA filed a cross-appeal.

Briefing by the parties to the appeals and cross-appeals was completed in August 2014. The court of appeal subsequently accepted a settlement agreement and issued an order dismissing three parties from further proceedings. As a result, the only remaining QSA opponents involved in the state appellate proceeding are the County of Imperial and the Imperial County Air Pollution Control District. No date for oral argument has been set. The impact that this litigation might have on Metropolitan's water supplies cannot be adequately determined at this time.

~~*QSA Related Litigation—Federal Court.* On January 28, 2010, Metropolitan was served with a federal complaint filed by the County of Imperial and the Imperial County Air Pollution Control District alleging that execution and implementation of three QSA related agreements violate NEPA and the federal Clean Air Act. The complaint named the Department of the Interior, Secretary of the Interior, Bureau of Reclamation and Commissioner of Reclamation as defendants, and Metropolitan, CVWD, IID and SDCWA as real parties in interest. With respect to NEPA, the complaint alleged that the environmental impact statement prepared by the Bureau of Reclamation: failed to adequately analyze potential impacts on the Salton Sea and on land use, growth and socioeconomics; improperly segmented various project components; failed to address cumulative impacts; and failed to address mitigation of potential impacts. With respect to the Clean Air Act, the complaint alleged that the Bureau of Reclamation failed to conduct a conformity analysis as required under the Act and Imperial County Air Pollution Control District's own rules. On April 6, 2012, the court ruled against the plaintiffs and in favor of the defendants on all claims. The court held that the plaintiffs lacked standing to pursue NEPA and Clean Air Act claims and that the NEPA claims lacked merit. On May 19, 2014, the Ninth Circuit ruled in favor of the defendants. The court held that the plaintiffs had standing to assert these claims, but that no violation of either NEPA or the Clean Air Act had occurred. On August 1, 2014, the court denied the plaintiffs' petition for rehearing and rejected their petition for rehearing en banc.~~

Navajo Nation Litigation. The Navajo Nation filed litigation against the Department of the Interior, specifically the Bureau of Reclamation and the Bureau of Indian Affairs, in 2003, alleging that the Bureau of Reclamation has failed to determine the extent and quantity of the water rights of the Navajo Nation in the Colorado River and that the Bureau of Indian Affairs has failed to otherwise protect the interests of the Navajo Nation. The complaint challenges the adequacy of the environmental review for the Interim Surplus Guidelines (as defined under “—Interim Surplus Guidelines” below) and seeks to prohibit the Department of the Interior from allocating any “surplus” water until such time as a determination of the rights of the Navajo Nation is completed. Metropolitan and other California water agencies filed motions to intervene in this action. In October 2004 the court granted the motions to intervene and stayed the litigation to allow negotiations among the Navajo Nation, federal defendants, CAWCD, State of Arizona and Arizona Department of Water Resources. After years of negotiations, a tentative settlement was proposed in 2012 that would provide the Navajo Nation with specified rights to water from the Little Colorado River and groundwater basins under the reservation, along with federal funding for development of water supply systems on the tribe's reservation. The proposed agreement was rejected by tribal councils for both the Navajo and the Hopi, who are now seeking to intervene. On May 16, 2013, the stay of proceedings was lifted. On June 3, 2013, the Navajo Nation moved for leave to file a first amended complaint, which the court granted on June 27, 2013. The amended complaint added a legal challenge to the Lower Basin Shortage Guidelines adopted by the Secretary of the Interior in 2007 that allow Metropolitan and other Colorado River water users to store water in Lake Mead. Metropolitan has used these new guidelines to store over 500,000 acre-feet of water in Lake Mead that may be delivered at Metropolitan's request in future years.

See “—*Intentionally-Created Surplus Program*” below. On July 22, 2014, the district court dismissed the lawsuit in its entirety, ruling that the Navajo Nation lacked standing and that the claim was barred against the federal defendants. The district court denied a motion by the Navajo Nation for leave to amend the complaint further after the dismissal. The Navajo Nation filed notice of intent to appeal the decision on September 19, 2014 from the dismissal of its claims related to the Interim Surplus Guidelines, the Lower Basin Shortage Guidelines, and breach of the federal trust obligation to the tribe. Metropolitan is unable to assess at this time the likelihood of success of this appeal or any future claims, or their potential effect on Colorado River water supplies.

Interim Surplus Guidelines. In January 2001, the Secretary of the Interior adopted guidelines (the “Interim Surplus Guidelines”) for use through 2016 in determining if there is surplus Colorado River water available for use in California, Arizona and Nevada. The purpose of the Interim Surplus Guidelines is to provide a greater degree of predictability with respect to the availability and quantity of surplus water through 2016. The Interim Surplus Guidelines were amended in 2007 and now extend through 2026 (see “—*Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead*” below). The Interim Surplus Guidelines contain a series of benchmarks for reductions in agricultural use of Colorado River water within California by set dates.

Under the Interim Surplus Guidelines, Metropolitan initially expected to divert up to 1.25 million acre-feet of Colorado River water annually under foreseeable runoff and reservoir storage scenarios from 2004 through 2016. However, an extended drought in the Colorado River Basin reduced these initial expectations. On May 16, 2002 SNWA and Metropolitan entered into an Agreement Relating to Implementation of Interim Colorado River Surplus Guidelines, in which SNWA and Metropolitan agreed to the allocation of unused apportionment as provided in the Interim Surplus Guidelines and on the priority of SNWA for interstate banking of water in Arizona. SNWA and Metropolitan entered into a storage and interstate release agreement on October 21, 2004. Under this program, SNWA can request that Metropolitan store unused Nevada apportionment in California. The amount of water stored through ~~2013~~2014 under this agreement is approximately ~~160,000~~205,000 acre-feet. In subsequent years, SNWA may request recovery of this stored water. As part of a 2012 executed amendment, it is expected that SNWA will not request return of this water before 2022. The stored water provides flexibility to Metropolitan for blending Colorado River water with State Water Project water and improves near-term water supply reliability.

Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead. In November 2007, the Bureau of Reclamation issued a Final Environmental Impact Statement (“EIS”) regarding new federal guidelines concerning the operation of the Colorado River system reservoirs. These new guidelines provide water release criteria from Lake Powell and water storage and water release criteria from Lake Mead during shortage and surplus conditions in the Lower Basin, provide a mechanism for the storage and delivery of conserved system and non-system water in Lake Mead and extend the Interim Surplus Guidelines through 2026. The Secretary of the Interior issued the final guidelines through a Record of Decision signed in December 2007. The Record of Decision and accompanying agreement among the Colorado River Basin States protect reservoir levels by reducing deliveries during drought periods, encourage agencies to develop conservation programs and allow the Colorado River Basin States to develop and store new water supplies. The Colorado River Basin Project Act of 1968 insulates California from shortages in all but the most extreme hydrologic conditions.

Intentionally-Created Surplus Program. Metropolitan and the Bureau of Reclamation executed an agreement on May 26, 2006 for a demonstration program that allowed Metropolitan to leave conserved water in Lake Mead that Metropolitan would otherwise have used in 2006 and 2007. Only “intentionally-created surplus” water (water that has been conserved through an extraordinary conservation measure, such as land fallowing) was eligible for storage in Lake Mead under this program. See the table “Metropolitan’s Water Storage Capacity and Water in Storage” under the heading “—Storage Capacity and Water in Storage” below. Metropolitan may store additional intentionally-created surplus water in Lake Mead under the federal

guidelines for operation of the Colorado River system reservoirs described above under the heading “*Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead.*” The Secretary of the Interior will deliver intentionally-created surplus water to Metropolitan in accordance with the terms of a December 13, 2007 Delivery Agreement between the United States and Metropolitan. As of January ~~2013,2015~~, Metropolitan had approximately ~~580,000~~124,000 acre-feet in its intentionally-created surplus accounts. These surplus accounts are made up of water conserved by fallowing in the Palo Verde Valley, projects implemented with IID in its service area, and groundwater desalination, specifically the Warren H. Brock Reservoir Project and the Yuma Desalting Plant pilot run. ~~Metropolitan stored nearly 161,000 acre-feet of intentionally-created surplus water in 2012 and took delivery of 93,857 acre-feet in 2013.~~

Environmental Considerations. Federal and state environmental laws protecting fish species and other wildlife species have the potential to affect Colorado River operations. A number of species that are on either “endangered” or “threatened” lists under the ESAs are present in the area of the Lower Colorado River, including among others, the bonytail chub, razorback sucker, southwestern willow flycatcher and Yuma clapper rail. To address this issue, a broad-based state/federal/tribal/private regional partnership that includes water, hydroelectric power and wildlife management agencies in Arizona, California and Nevada have developed a multi-species conservation program for the main stem of the Lower Colorado River (the Lower Colorado River Multi-Species Conservation Program or “MSCP”). The MSCP allows Metropolitan to obtain federal and state permits for any incidental take of protected species resulting from current and future water and power operations of its Colorado River facilities and to minimize any uncertainty from additional listings of endangered species. The MSCP also covers operations of federal dams and power plants on the river that deliver water and hydroelectric power for use by Metropolitan and other agencies. The MSCP covers 27 species and habitat in the Lower Colorado River from Lake Mead to the Mexican border for a term of 50 years. Over the 50 year term of the program, the total cost to Metropolitan will be about \$88.5 million (in 2003 dollars), and annual costs will range between \$0.8 million and \$4.7 million (in 2003 dollars).

Quagga Mussel Control Program. In January 2007 quagga mussels were discovered in Lake Mead. Quagga mussels can reproduce quickly and, if left unmanaged, can clog intakes and raw water conveyance systems, alter or destroy fish habitats and affect lakes and beaches. Quagga mussels were introduced in the Great Lakes in the late 1980s. These organisms infest much of the Great Lakes basin, the St. Lawrence Seaway, and much of the Mississippi River drainage system. The most likely source of the quagga mussel infestation in the Colorado River is recreational boats with exposure to water bodies around the Great Lakes. Metropolitan developed a program in 2007 to address the long term introduction of mussel larvae into the Colorado River Aqueduct from the Lower Colorado River, which is now heavily colonized from Lake Mead through Lake Havasu. The quagga mussel control program consists of surveillance activities and control measures. Surveillance activities are conducted annually in conjunction with regularly scheduled two- to three-week long Colorado River Aqueduct shutdowns, which have the added benefit of desiccating exposed quagga mussels. Control activities consist of continuous chlorination at Copper Basin, quarterly use of a mobile chlorinator at outlet towers and physical removal of mussels from the trash racks in Lake Havasu. Recent shutdown inspections have demonstrated that the combined use of chlorine and regularly scheduled shutdowns effectively control mussel infestation in the Colorado River Aqueduct. Metropolitan’s costs for controlling quagga mussels are between \$4 million and \$5 million per year.

Water Transfer, Storage and Exchange Programs

General. California’s agricultural activities consume approximately 34 million acre-feet of water annually, which is approximately 80 percent of the total water used for agricultural and urban uses and 40 percent of the water used for all consumptive uses, including environmental demands. Voluntary water transfers and exchanges can make a portion of this agricultural water supply available to support the State’s urban areas. Such existing and potential water transfers and exchanges are an important element for

improving the water supply reliability within Metropolitan's service area and accomplishing the reliability goal set by Metropolitan's Board. Metropolitan is currently pursuing voluntary water transfer and exchange programs with State, federal, public and private water districts and individuals. The following are summary descriptions of some of these programs.

Arvin-Edison/Metropolitan Water Management Program. In December 1997, Metropolitan entered into an agreement with the Arvin-Edison Water Storage District ("Arvin-Edison"), an irrigation agency located southeast of Bakersfield, California. Under the program, Arvin-Edison stores water on behalf of Metropolitan. In January 2008, Metropolitan and Arvin-Edison amended the agreement to enhance the program's capabilities and to increase the delivery of water to the California Aqueduct. Up to 350,000 acre-feet of Metropolitan's water may be stored and Arvin-Edison is obligated to return up to 75,000 acre-feet of stored water in any year to Metropolitan, upon request. The agreement will terminate in 2035 unless extended. To facilitate the program, new wells, spreading basins and a return conveyance facility connecting Arvin-Edison's existing facilities to the California Aqueduct have been constructed. The agreement also provides Metropolitan priority use of Arvin-Edison's facilities to convey high quality water available on the east side of the San Joaquin Valley to the California Aqueduct. Metropolitan's current storage account under the Arvin-Edison/Metropolitan Water Management Program is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading "—Storage Capacity and Water in Storage" below.

Semitropic/Metropolitan Groundwater Storage and Exchange Program. In 1994 Metropolitan entered into an agreement with the Semitropic Water Storage District ("Semitropic"), located adjacent to the California Aqueduct north of Bakersfield, to store water in the groundwater basin underlying land within Semitropic. The minimum annual yield available to Metropolitan from the program is 31,500 acre-feet of water and the maximum annual yield is 223,000 acre-feet of water depending on the available unused capacity and the State Water Project allocation. Metropolitan's current storage account under the Semitropic program is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading "—Storage Capacity and Water in Storage" below.

California Aqueduct Dry-Year Transfer Program. Metropolitan has entered into agreements with the Kern Delta Water District, the Mojave Water Agency ("Demonstration Water Exchange Program") and the San Bernardino Valley Municipal Water District ("SBVMWD") to insure against regulatory and operational uncertainties in the State Water Project system that could impact the reliability of existing supplies. The total potential yield from the three agreements is approximately 80,000 acre-feet of water per year when sufficient water is available.

Metropolitan entered into an agreement with SBVMWD in April 2001 to coordinate the use of facilities and State Water Project water supplies. The agreement allows Metropolitan a minimum purchase of 20,000 acre-feet on an annual basis with the option to purchase additional water when available. Also, the program includes 50,000 acre-feet of carryover storage. In addition to water being supplied using the State Water Project, the previously stored water can be returned using an interconnection between the San Bernardino Central Feeder and Metropolitan's Inland Feeder. On October 14, 2014, the Board approved the extension of this agreement to December 31, 2035.

Metropolitan entered into an agreement with Kern Delta Water District on May 27, 2003, for a groundwater banking and exchange transfer program to allow Metropolitan to store up to 250,000 acre-feet of State Water Contract water in wet years and permit Metropolitan, at Metropolitan's option, a return of up to 50,000 acre-feet of water annually during hydrologic and regulatory droughts. Additionally, Metropolitan entered into a groundwater banking and exchange transfer agreement with Mojave Water Agency on October 29, 2003. This agreement was amended in 2011 to allow for the cumulative storage of up to 390,000 acre-feet. The agreement allows for Metropolitan to store water in an exchange account for later return. Through 2021, and when the State Water Project allocation is 60 percent or less, Metropolitan can annually

withdraw the Mojave Water Agency's State Water Project contractual amounts in excess of a 10 percent reserve. When the State Water Project allocation is over 60 percent, the reserved amount for Mojave's local needs increases to 20 percent. Under a 100 percent allocation, the State Water Contract provides Mojave Water Agency 82,800 acre-feet of water. Metropolitan's current storage account under these programs is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading "—Storage Capacity and Water in Storage" below.

Other Water Purchase, Storage and Exchange Programs in the San Joaquin and Sacramento Valleys. Metropolitan has been negotiating, and will continue to pursue, water purchase, storage and exchange programs with other agencies in the Sacramento and San Joaquin Valleys. These programs involve the storage of both State Water Project supplies and water purchased from other sources to enhance Metropolitan's dry-year supplies and the exchange of normal year supplies to enhance Metropolitan's water reliability and water quality, in view of dry conditions and potential impacts from the ESA cases discussed above under the heading "—State Water Project—*Endangered Species Act Considerations.*" In addition, in the fall of 2008 DWR convened the State Drought Water Bank (the "Drought Water Bank") as a one-year program to help mitigate water shortages in 2009. During 2009, Metropolitan purchased 36,900 acre-feet of Central Valley Water supplies through the Drought Water Bank, resulting in approximately 29,000 acre-feet of water deliveries after accounting for carriage and conveyance losses. In calendar year 2010, Metropolitan participated with other State Water Contractors as a group to purchase 88,137 acre-feet of water, resulting in approximately 68,000 acre-feet of deliveries to Metropolitan after carriage and conveyance losses. Additionally during 2010, Metropolitan entered into two transactions with the Westlands Water District and the San Luis Water District, neither of which is subject to carriage losses. Under the first transaction, Metropolitan purchased 18,453 acre-feet of water. In the second, Metropolitan accepted delivery of 110,692 acre-feet of water stored in the San Luis Reservoir, a joint use facility of the State Water Project and federal Central Valley Project, and returned two-thirds of that amount from Metropolitan's State Water Project supply in 2011 for a net yield of approximately 37,000 acre-feet.

Metropolitan entered into an agreement with DWR in December 2007 to purchase a portion of the water released by the Yuba County Water Agency ("YCWA"). YCWA was involved in a SWRCB proceeding in which it was required to increase Yuba River fishery flows. Within the framework of agreements known as the Yuba River Accord, DWR entered into an agreement for the long-term purchase of water from YCWA. Metropolitan, other State Water Project Contractors, and the San Luis Delta Mendota Water Authority entered into separate agreements with DWR for the purchase of portions of the water made available. Metropolitan's agreement allows Metropolitan to purchase ~~at least 13,750, in dry years through 2025, available water supplies, which have ranged from approximately 10,000~~ acre-feet to ~~35,000~~67,068 acre-feet per year ~~of water supplies in dry years through 2025.~~ The agreement permits YCWA to transfer additional supplies at its discretion. For calendar years 2008, 2009 and 2010, Metropolitan purchased 26,430 acre-feet, 42,915 acre-feet and 67,068 acre-feet of water, respectively, from YCWA under this program. No purchases were made in calendar years 2011 and 2012, due to favorable water supply conditions. In calendar ~~year 2013,~~years 2013 and 2014, Metropolitan purchased 10,209 acre-feet and approximately 11,000 acre-feet, respectively.

In 2013, in response to dry conditions, DWR established a new Multi-Year Water Pool Demonstration Program to allow two-year sales of State Water Project supplies between State Water Project Contractors. In ~~2013,~~2013 and 2014, Metropolitan purchased 30,000 acre-feet ~~of these supplies~~and zero acre-feet of these supplies, respectively. DWR is administering a Multi-Year Water Pool during 2015 and 2016 because of continuing dry conditions. The amount of water available for purchase is not yet known.

Metropolitan/CVWD/Desert Water Agency Exchange and Advance Delivery Agreement. Metropolitan has agreements with the CVWD and the Desert Water Agency ("~~Desert~~DWA") that require Metropolitan to exchange its Colorado River water for those agencies' State Water Project contractual water on an annual basis. Because ~~Desert~~DWA and CVWD do not have a physical connection to the State Water

Project, Metropolitan takes delivery of ~~DesertDWA~~'s and CVWD's State Water Project supplies and delivers a like amount of Colorado River water to the agencies. In accordance with an advance delivery agreement executed by Metropolitan, CVWD and ~~DesertDWA~~, Metropolitan has delivered Colorado River water in advance to these agencies for storage in the Upper Coachella Valley groundwater basin. In years when it is necessary to augment available supplies to meet local demands, Metropolitan has the option to meet the exchange delivery obligation through drawdowns of the advance delivery account, rather than deliver its Colorado River supply. Metropolitan's current storage account under the CVWD/~~DesertDWA~~ program is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading "—Storage Capacity and Water in Storage" below. In addition to the CVWD/~~DesertDWA~~ exchange agreements, Metropolitan has entered into separate agreements with CVWD and ~~DesertDWA~~ for delivery of non-State Water Project supplies acquired by CVWD or ~~DesertDWA~~. Similarly, Metropolitan takes delivery of these supplies from State Water Project facilities and incurs an exchange obligation to CVWD or ~~DesertDWA~~. From 2008 through ~~2013,2014~~, Metropolitan has received a net additional supply of ~~52,18961,965~~ acre-feet of water acquired by CVWD and ~~DesertDWA~~.

Other Agreements. Metropolitan is entitled to storage and access to stored water in connection with various storage programs and facilities. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct" and "REGIONAL WATER RESOURCES—Local Water Supplies—*Conjunctive Use*" in this Appendix A, as well as the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading "—Storage Capacity and Water in Storage" below.

Storage Capacity and Water in Storage

Metropolitan's storage capacity, which includes reservoirs, conjunctive use and other groundwater storage programs within Metropolitan's service area and groundwater and surface storage accounts delivered through the State Water Project or Colorado River Aqueduct, is approximately 5.93 million acre-feet. In ~~2013,2014~~, approximately 626,000 acre-feet of stored water was emergency storage that was reserved for use in the event of supply interruptions from earthquakes or similar emergencies (see "METROPOLITAN'S WATER DELIVERY SYSTEM—Seismic Considerations" in this Appendix A), as well as extended drought. Metropolitan's emergency storage requirement is established periodically to provide a six-month water supply at 75 percent of member agencies retail demand under normal hydrologic conditions. Metropolitan's ability to replenish water storage, both in the local groundwater basins and in surface storage and banking programs, has been limited by Bay-Delta pumping restrictions under the Interim Remedial Order in *NRDC v. Kempthorne* and the biological opinions issued for listed species. See "—State Water Project—*Endangered Species Act Considerations*" above. Metropolitan replenishes its storage accounts when imported supplies exceed demands. Effective storage management is dependent on having sufficient years of excess supplies to store water so that it can be used during times of shortage. Historically, excess supplies have been available in about seven of every ten years. Metropolitan forecasts that, with anticipated supply reductions from the State Water Project due to pumping restrictions, it will need to draw down on storage in about seven of ten years and will be able to replenish storage in about three years out of ten. This reduction in available supplies extends the time required for storage to recover from drawdowns and could require Metropolitan to implement its Water Supply Allocation Plan during extended dry periods.

As a result of increased State Water Project supplies and reduced demands from 2010 to 2012, Metropolitan rebuilt its storage after several years of withdrawals to approximately 3.375 million acre-feet, including emergency storage. This was the highest end-of-year total water reserves in Metropolitan's history. In 2013, Metropolitan drew 407,000 acre-feet from storage to meet demands, reducing overall storage to 2.968 million acre-feet. Metropolitan ~~expects to draw between 1.0 million acre feet and 1.3~~withdrew ~~approximately 1.2~~ million acre-feet from storage in 2014 and ~~anticipates that its~~ 2014 year-end overall storage ~~will be between 1.7 million acre feet and 2.0~~was approximately 1.8 million acre-feet. The following table shows three years of Metropolitan's water in storage as of January 1, ~~2014~~, including emergency storage.

| *Draft Dated 2/26/15*

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METROPOLITAN'S WATER STORAGE CAPACITY AND WATER IN STORAGE⁽¹⁾
(in Acre-Feet)

<u>Water Storage Resource</u>	<u>Storage Capacity</u>	<u>Water in Storage January 1, 2015</u>	<u>Water in Storage January 1, 2014</u>	<u>Water in Storage January 1, 2013</u>	<u>Water in Storage January 1, 2012</u>
<i>Colorado River Aqueduct</i>					
Desert / CVWD Advance Delivery Account	800,000	<u>253,000</u>	260,000	321,000	<u>203,000</u>
Lake Mead ICS	<u>1,500,000</u>	<u>124,000</u>	<u>474,000</u>	580,000	<u>419,000</u>
Subtotal	2,300,000	377,000	734,000	901,000	622,000
<i>State Water Project</i>					
Arvin-Edison Storage Program	350,000	<u>166,000</u>	180,000	220,000	<u>164,000</u>
Semitropic Storage Program	350,000	<u>194,000</u>	238,000	285,000	<u>245,000</u>
Kern Delta Storage Program	250,000	<u>148,000</u>	169,000	179,000	<u>135,000</u>
San Bernardino Valley MWD					
Coordinated Operating Agreement	50,000	<u>-0-</u>	-0-	-0-	<u>-0-</u>
Mojave Storage Program	390,000 ⁽⁵⁾	<u>39,000</u>	39,000	60,000	<u>45,000</u>
Castaic Lake and Lake Perris ⁽²⁾	219,000	<u>-0-</u>	219,000	219,000	<u>219,000</u>
Metropolitan Article 56 Carryover ⁽³⁾	200,000 ⁽⁶⁾	<u>33,000</u>	49,000		
Other State Water Project Carryover ⁽⁴⁾	n/a	<u>-0-</u>	174,000	124,000	<u>43,000</u>
Emergency Storage	<u>334,000</u>	<u>328,000</u>	<u>334,000</u>	<u>334,000</u>	<u>334,000</u>
Subtotal	2,143,000	908,000	1,402,000	1,577,000	1,385,000
<i>Within Metropolitan's Service Area</i>					
Diamond Valley Lake	810,000	<u>394,000</u>	584,000	690,000	<u>786,000</u>
Lake Mathews	182,000	<u>78,000</u>	139,000	102,000	<u>142,000</u>
Lake Skinner	44,000	<u>30,000</u>	36,000	38,000	<u>37,000</u>
Subtotal⁽⁷⁾	1,036,000	502,000	759,000	830,000	965,000
<i>Member Agency Storage Programs</i>					
Cyclic Storage, Conjunctive Use, and Supplemental Storage	<u>455,000</u>	<u>26,000</u>	73,000	67,000	<u>30,000</u>
Total	5,934,000	1,813,000	2,968,000	3,375,000	3,002,000

Source: Metropolitan.

- (1) Water storage capacity and water in storage are measured based on engineering estimates and are subject to change.
- (2) Flexible storage allocated to Metropolitan under its State Water Contract.
- (3) Article 56 Carryover storage capacity is dependent on the annual State Water Project allocation, which varies from year to year. Article 56 supplies represent water that is allocated to a State Water Project contractor in a given year and carried over to the next year pursuant to the State Water Contract.
- (4) Includes Article 56 Carryover from prior years, non-project carryover, and carryover of curtailed deliveries pursuant to Article 14(b) of Metropolitan's State Water Contract.
- (5) The Mojave Storage Program agreement was amended in 2011 to allow for cumulative storage of up to 390,000 acre-feet.
- (6) Metropolitan's State Water Project carryover capacity ranges from 100,000 to 200,000 acre-feet, on a sliding scale that depends on the final State Water Project allocation. At allocations of 50 percent or less, Metropolitan may store 100,000 acre-feet, and at allocations of 75 percent or greater, Metropolitan may store up to 200,000 acre-feet. For the purposes of this table, the highest possible carryover capacity is displayed.
- (7) Includes 292,000 acre-feet of emergency storage in Metropolitan's reservoirs.

Water Conservation

The central objective of Metropolitan's water conservation program is to help ensure adequate, reliable and affordable water supplies for Southern California by actively promoting efficient water use. The importance of conservation to the region has increased in recent years because of drought conditions in the State Water Project watershed and court-ordered restrictions on Bay-Delta pumping, as described under "—State Water Project" above. Water conservation is an integral component of Metropolitan's IRP Strategy, WSDM [Planplan](#) and Water Supply Allocation Plan, each described in this Appendix A under "METROPOLITAN'S WATER SUPPLY."

Metropolitan's conservation program has largely been developed to assist its member agencies in meeting the "best management practices" ("BMP") of the California Urban Water Conservation Council's Memorandum of Understanding Regarding Urban Water Conservation in California ("CUWCC MOU") and to meet the conservation goals of the 2010 IRP Update. See "—Integrated Water Resources Plan" above. Under the terms of the CUWCC MOU and Metropolitan's Conservation Credits Program, Metropolitan assists and co-funds member agency conservation programs designed to achieve greater water use efficiency in residential, commercial, industrial, institutional and landscape uses. Metropolitan uses its Water Stewardship Rate, which is charged for every acre-foot of water conveyed by Metropolitan, together with available grant funds, to fund conservation incentives and other water management programs. All users of Metropolitan's system benefit from the system capacity made available by investments in demand management programs like the Conservation Credits Program. See "METROPOLITAN REVENUES—Rate Structure—*Water Stewardship Rate*" in this Appendix A. Direct spending by Metropolitan on active conservation incentives, including rebates for water-saving plumbing fixtures, appliances and equipment, from fiscal year 1989-90 through fiscal year 2013-14 was about \$352 million. In ~~fiscal year 2013-February~~ 2014, Metropolitan increased the ~~annual conservation budget from \$20 million to \$40 million, which has been used to fund a \$5.5 million outreach campaign and to double~~ conservation budget for fiscal years 2013-14 and 2014-15 by a total of \$20 million. In December 2014, the Board increased the conservation budget for fiscal years 2013-14 and 2014-15 by an additional \$40 million. Also, in May 2014, the Board doubled the incentive for the turf replacement program from \$1 per square foot to \$2 per square foot. As of ~~August 2014, \$15.8~~ February 2015, \$92.5 million has been committed to the turf replacement program. The 2010 Integrated Water Resources Plan Update estimates that 1,037,000 acre-feet of water will be conserved annually in southern California by 2025. See "—Integrated Water Resources Plan" above.

~~The WSDM Plan, which was adopted by Metropolitan's Board in April 1999, evolved from Metropolitan's experiences during the droughts of 1976-77 and 1987-92. The WSDM Plan~~ In addition to ongoing conservation, Metropolitan has developed a WSDM plan, which splits resource actions into two major categories: Surplus Actions and Shortage Actions. ~~The Surplus Actions store surplus water, first inside then outside the region. The Shortage Actions of the WSDM Plan are split into three sub-categories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as a part of the response to prevailing shortage conditions~~ See — "Water Surplus and Drought Management Plan" below. Conservation and water efficiency programs are part of Metropolitan's resource management strategy ~~through all categories~~ that make up these Surplus and Shortage actions.

Metropolitan's plan for allocation of water supplies in the event of shortage (the "Water Supply Allocation Plan"; see "—Water Supply Allocation Plan" below) allocates Metropolitan's water supplies among its member agencies, based on the principles contained in the WSDM [Planplan](#), to reduce water use and drawdowns from water storage reserves. Metropolitan's member agencies and retail water suppliers in Metropolitan's service area also have the ability to implement water conservation and allocation programs, and some of the retail suppliers in Metropolitan's service area have initiated conservation measures. The success of conservation measures in conjunction with the Water Supply Allocation Plan is evidenced as a contributing factor in the lower than budgeted water sales during fiscal years 2009-10, 2010-11 and 2011-12.

Legislation approved in November 2009 sets a statewide conservation target for urban per capita water use of 20 percent reductions by 2020 (with credits for existing conservation) at the retail level, providing an additional catalyst for conservation by member agencies and retail suppliers. (See “—State Water Project—*Bay-Delta Regulatory and Planning Activities*” above.) Metropolitan’s water sales projections incorporate an estimate of conservation savings that will reduce retail demands. Current projections include an estimate of additional water use efficiency savings that would result from local agencies reducing their per capita water use in response to the 20 percent by 2020 conservation savings goals required by recent legislation as well as an estimate of additional conservation that would have to occur to reach Metropolitan’s IRP goal of reducing overall regional per capita water use by 20 percent by 2020.

Water Surplus and Drought Management Plan

The WSDM plan, which was adopted by Metropolitan’s Board in April 1999, evolved from Metropolitan’s experiences during the droughts of 1976-77 and 1987-92. The WSDM plan is a planning document that Metropolitan uses to guide inter-year and intra-year storage operations, and splits resource actions into two major categories: surplus actions and shortage actions. The surplus actions emphasize storage of surplus water inside the region, followed by storage of surplus water outside the region. The shortage actions emphasize critical storage programs and facilities and conservation programs that make up part of Metropolitan’s response to shortages. Implementation of the plan is directed by a WSDM team, made up of Metropolitan staff, that meets regularly throughout the year and more frequently between November and April as hydrologic conditions develop. The WSDM team develops and recommends storage actions to senior management on a regular basis and provides updates to the Board on hydrological conditions, storage levels and planned storage actions through detailed reports.

Water Supply Allocation Plan

The Water Supply Allocation Plan was approved by ~~the~~ Metropolitan’s Board in February 2008. The Water Supply Allocation Plan provides a formula for equitable distribution of available water supplies in case of extreme water shortages within Metropolitan’s service area. On Most recently December 9, 2014, the Board approved adjustments to the formula for calculating member agency supply allocations for future implementation of the Water Supply Allocation Plan. Although the Act gives each of Metropolitan’s member agencies a preferential entitlement to purchase a portion of the water served by Metropolitan (see “METROPOLITAN REVENUES—Preferential Rights”), historically, these rights have not been used in allocating Metropolitan’s water.

Implementation of the Water Supply Allocation first occurred on April 14, 2009, when Metropolitan’s Board adopted a resolution declaring a regional water shortage and implementing the Water Supply Allocation Plan, effective July 1, ~~2009-2009~~ through June 30, 2010. The Board set the “Regional Shortage Level” at Water Supply Allocation Plan Level 2, which required reduction of regional water use by approximately 10 percent and resulted in a total allocation of about 2.09 million acre-feet of Metropolitan water in fiscal year 2009-10. On April 13, 2010, the Board adopted a resolution recognizing the continuing regional water shortage and again setting the Regional Shortage Level at Water Supply Allocation Plan Level 2, effective July 1, 2010 through June 30, 2011, which sustained the regional water use reduction of approximately 10 percent. Due to improved hydrologic and storage conditions, on April 12, 2011, the Board terminated implementation of the 2010-11 Water Supply Allocation Plan, restoring imported water deliveries to member agencies to pre-allocation levels. ~~Following Board-directed review of the Water Supply Allocation Plan three years after its approval, on September 13, 2011, the Board approved adjustments to the formula for calculating member agency supply allocations for any future implementation of the Water Supply Allocation Plan. Although the Act gives each of Metropolitan’s member agencies a preferential entitlement to purchase a portion of the water served by Metropolitan (see “METROPOLITAN~~

~~REVENUES—Preferential Rights”), historically, these rights have not been used in allocating Metropolitan’s water.~~

Metropolitan’s member agencies and retail water suppliers in Metropolitan’s service area also may implement water conservation and allocation programs within their respective service territories in times of shortage.

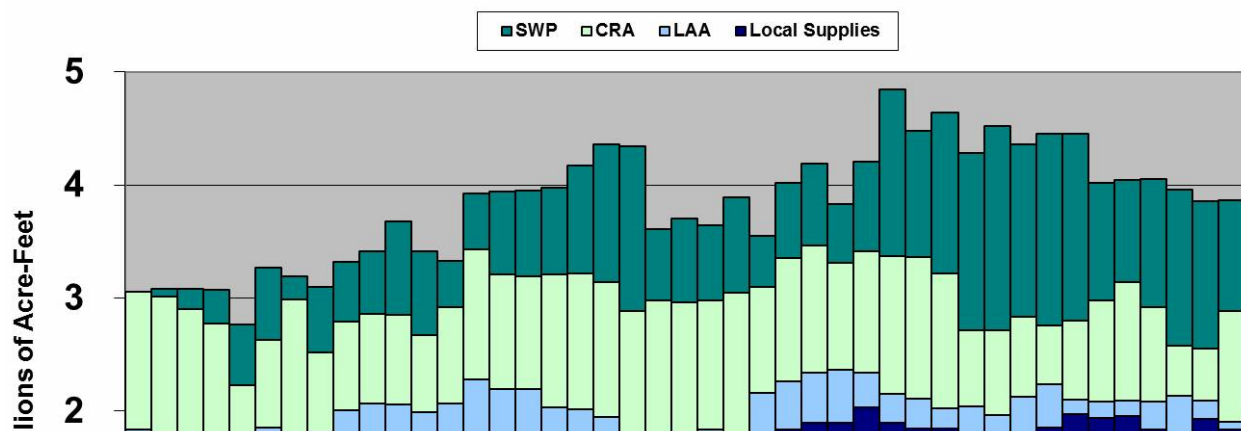
REGIONAL WATER RESOURCES

The water supply for Metropolitan's service area is provided in part by Metropolitan and in part by non-Metropolitan sources available to members. Approximately 60 percent of the water supply for Metropolitan’s service area is imported water received by Metropolitan from its Colorado River Aqueduct and the State Water Project and by the City of Los Angeles (the “City”) from the Los Angeles Aqueduct. While the City is one of the largest water customers of Metropolitan, it receives a substantial portion of its water from the Los Angeles Aqueduct and local groundwater supply. The balance of water within the region is produced locally, primarily from groundwater supplies and runoff.

Metropolitan’s member agencies are not required to purchase or use any of the water available from Metropolitan. Some agencies depend on Metropolitan to supply nearly all of their water needs, regardless of the weather. Other agencies, with local surface reservoirs or aqueducts that capture rain or snowfall, rely on Metropolitan more in dry years than in years with heavy rainfall, while others, with ample groundwater supplies, purchase Metropolitan water only to supplement local supplies and to recharge groundwater basins. The demand for supplemental supplies provided by Metropolitan is dependent on water use at the retail consumer level and the amount of locally supplied and conserved water. See “METROPOLITAN’S WATER SUPPLY—Water Conservation” in this Appendix A and “—Local Water Supplies” below. Consumer demand and locally supplied water vary from year to year, resulting in variability in water sales. Future reliance on Metropolitan supplies will be dependent, among other things, on local projects and the amount of water, if any, that may be derived from sources other than Metropolitan. In recent years, supplies and demands have been affected by drought, water use restrictions, economic conditions, weather conditions and environmental laws, regulations and judicial decisions, as described in this Appendix A under “METROPOLITAN’S WATER SUPPLY.” For information on Metropolitan's water sales revenues, see “METROPOLITAN REVENUES” and “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

The following graph shows a summary of the regional sources of water supply for the years 1971 to 2013. Local supplies available within Metropolitan’s service area are augmented by water imported by the City through the Los Angeles Aqueduct (“LAA”) and Metropolitan supplies provided through the CRA and State Water Project.

**Source of Water Supply in the Metropolitan Service Area
(1971-2013)**



Source: Metropolitan.

The major sources of water for Metropolitan’s member agencies in addition to supplies provided by Metropolitan are described below.

Los Angeles Aqueduct

The City, through its Department of Water and Power (“LADWP”), operates its Los Angeles Aqueduct system to import water from the Owens Valley and the Mono Basin on the eastern slopes of the Sierra Nevada in eastern California. Prior to the 1990-1991 drought, the City had imported an average of 440,000 acre-feet of water annually from the combined Owens Valley/Mono Basin system, of which about 90,000 acre-feet came from the Mono Basin. Under the Mono Lake Basin Water Right Decision (Decision 1631) issued in September 1994, which revised LADWP’s water rights licenses in the Mono Basin, the City is limited to export 16,000 acre-feet annually from the Mono Basin until it reaches its target elevation of 6,391 feet above mean sea level.

Pursuant to the City’s turnout agreement with DWR, Antelope Valley-East Kern Water Agency (“AVEK”) and Metropolitan, LADWP commenced construction in 2010 of the turnout facilities along the California Aqueduct within AVEK’s service area. Upon completion, expected by early 2015, the turnout will enable delivery of water from the California Aqueduct to the Los Angeles Aqueduct. Conditions precedent to such delivery of water include obtaining agreements for the transfer of non-State Water Project water directly from farmers, water districts or others in Northern and Central California, available capacity in the California Aqueduct and compliance with State Water Project water quality requirements. The agreement allows for use of the turnout for delivery of non-State Water Project water annually to the City in amounts not to exceed the supplies lost to the City as a result of its Eastern Sierra environmental obligations, including water for the Lower Owens River Project and the Owens Lake Dust Mitigation Project which could use up to 95,000 acre-feet of Los Angeles Aqueduct water.

Historically, the Los Angeles Aqueduct and local groundwater supplies have been nearly sufficient to meet the City’s water requirements during normal water supply years. As a result, prior to the 1990-1991 drought, only about 13 percent of the City’s water needs (approximately 82,000 acre-feet) were supplied by Metropolitan. From fiscal year 2000-01 to fiscal year 2010-11, approximately 31 to 71 percent of the City’s total water requirements were met by Metropolitan. For the five fiscal years ended June 30, 2014, the City’s water deliveries from Metropolitan averaged approximately 293,000 acre-feet per year, which constituted approximately 53 percent of the City’s total water supply. Deliveries from Metropolitan to the City during this period varied between approximately 166,000 acre-feet per year and approximately ~~435,000~~442,000 acre-feet per year. See “METROPOLITAN REVENUES—Principal Customers” in this Appendix A. According to LADWP’s Year 2010 Urban Water Management Plan, the City is planning to increase locally-developed supplies including recycled water, new conservation, stormwater capture and local groundwater from the average for the five-year period ending June 30, 2010 of 12 percent to 43 percent of its normal year supplies by fiscal year 2034-35. Accordingly, the City’s reliance on Metropolitan supplies will decrease from the five year average ending June 30, 2010 of 52 percent to 24 percent of its normal year supplies by fiscal year 2034-35. However, the City may still purchase up to 511,000 acre-feet per year or 82 percent of its dry year supplies from Metropolitan until 2035. This corresponds to an increase from normal to dry years of approximately 257,000 acre-feet in potential demand for supplies from Metropolitan.

LADWP analyzed the additional impacts to the Los Angeles Aqueduct’s water supply deliveries for various environmental projects aimed at improving air quality and fish and riparian habitat in the Owens Valley. LADWP reports that, in 2013, 62 percent of its Los Angeles Aqueduct water was devoted to dust and environmental mitigation projects in the Owens Valley and Eastern Sierra, resulting in the need to purchase an equivalent amount of Metropolitan supply. ~~On June 27, 2013,~~In November 2014, LADWP ~~and~~

~~regulators reached a major agreement regarding future dust control on portions of Owens Lake and use of new water-saving dust control measures.~~ reached an agreement over implementation of dust control measures on Owens Lake, which is expected to save nearly 8,600 acre-feet of water in 2015 and expand water savings in the future.

Local Water Supplies

Local water resources include groundwater production, recycled water production and diversion of surface flows. While local water resources are non-Metropolitan sources of water supply, Metropolitan has executed agreements for storage of Metropolitan supplies in local groundwater basins and provided incentives for local supply development as described below. Member agencies and other local agencies have also independently funded and developed additional local supplies, including groundwater storage and clean-up, recycled water and desalination of brackish or high salt content water.

Metropolitan's water sales projections are based in part on projections of locally-supplied water. Projections of future local supplies are based on estimated yields from sources and projects that are currently producing water or are under construction at the time a water sales projection is made. Additional reductions in Metropolitan's water sales projections are made to account for future local supply augmentation projects, based on the 2010 IRP Update goals. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Projections" and "METROPOLITAN'S WATER SUPPLY—Integrated Water Resources Plan" in this Appendix A.

Groundwater. Demands for about 1.5 million acre-feet per year, about one-third of the annual water demands for approximately ~~+8.4~~18.5 million residents of Metropolitan's service area, are met from groundwater production. Local groundwater supplies are supported by recycled water, which is blended with imported water and recharged into groundwater basins, and also used for creating seawater barriers that protect coastal aquifers from seawater intrusion.

Groundwater Storage Programs. Metropolitan has executed agreements with a number of agencies to develop groundwater storage projects in its service area. These projects are designed to help meet the water delivery reliability goals of storing surplus imported supplies when available so that local agencies can withdraw stored groundwater during droughts or other periods of water supply shortage. In 2000, Metropolitan was allocated \$45 million in State Proposition 13 bond proceeds to develop groundwater storage projects in Metropolitan's service area. The nine projects provide about 212,000 acre-feet of groundwater storage and have a combined extraction capacity of about 70,000 acre-feet per year. During fiscal year 2008-09, over 70,000 acre-feet of stored water was produced and sold from these storage accounts. Fiscal year 2009-10 sales from the nine accounts totaled nearly 41,000 acre-feet, leaving a balance of approximately 26,000 acre-feet in the storage accounts. Metropolitan began refilling the programs in fiscal year 2010-11. As of October 2014, the balance in the nine accounts was approximately 49,000 acre-feet. Metropolitan has called nearly 40,000 acre-feet to be produced from these storage accounts during the 15-month period from April 2014 through June 2015. See table "Metropolitan's Water Storage Capacity and Water in Storage" under "METROPOLITAN'S WATER SUPPLY—Storage Capacity and Water in Storage" in this Appendix A.

Recovered Groundwater. Contamination of groundwater supplies is a growing threat to local groundwater production. Metropolitan has been supporting increased groundwater production and improved regional supply reliability by offering financial incentives to agencies for production and treatment of degraded groundwater since 1991. Metropolitan has executed agreements with local agencies to provide financial incentives to 24 projects that recover contaminated groundwater with total contract yields of about 112,500 acre-feet per year. During fiscal year 2013-14, Metropolitan provided incentives for approximately 68,400 acre-feet of recovered water under these agreements. Total groundwater recovery use under executed agreements is expected to grow to 76,000 acre-feet ~~by~~in 2015.

Surface Runoff. Local surface water resources consist of runoff captured in storage reservoirs and diversions from streams. Since 1980, agencies have used an average of 116,000 acre-feet per calendar year of local surface water. Local surface water supplies are heavily influenced by year to year local weather conditions, varying from a high of 188,000 acre-feet in calendar year 1998 to a low of 65,000 acre-feet in calendar year 2003.

Conjunctive Use. Conjunctive use is accomplished when groundwater basins are used to store imported supplies during water abundant periods. The stored water is used during shortages and emergencies with a corresponding reduction in surface deliveries to the participating agencies. Regional benefits include enhancing Metropolitan's ability to capture excess surface flows during wet years from both the State Water Project and Colorado River. Groundwater storage is accomplished using spreading basins, injection wells, and in-lieu deliveries where imported water is substituted for groundwater, and the groundwater not pumped is considered stored water.

Metropolitan has promoted conjunctive use at the local agency level under its Replenishment Service Program by discounting rates for imported water placed into groundwater or reservoir storage during wet months. The discounted rate and program rules encouraged construction of additional groundwater production facilities allowing local agencies to be more self-sufficient during shortages. (See "*Groundwater Storage Programs*" above.) In calendar year 2006, Metropolitan delivered approximately 247,000 acre-feet of water as replenishment water. In calendar year 2007, Metropolitan delivered approximately 46,000 acre-feet of water as replenishment water through May 1, 2007 then discontinued such deliveries until May 10, 2011 when Metropolitan's Board authorized sale of up to 225,000 acre-feet of discounted replenishment service deliveries to member agencies for the remainder of calendar year 2011. In calendar year 2011, Metropolitan delivered approximately 225,000 acre-feet of this discounted replenishment water. No replenishment sales were budgeted for fiscal year 2012-13 and thereafter. The Replenishment Service Program was discontinued effective December 31, 2012. See "METROPOLITAN REVENUES—Classes of Water Service—*Replenishment*" and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Projections" in this Appendix A.

Recycled Water. Metropolitan has supported recycled water use to offset water demands and improve regional supply reliability by offering financial incentives to agencies for production and sales of recycled water since 1982. Metropolitan has executed agreements with local agencies to provide financial incentives to 75 recycled water projects with total contract yields of about 307,000 acre-feet per year. During fiscal year 2013-14, Metropolitan provided incentives for approximately 180,000 acre-feet of reclaimed water under these agreements. Total recycled water use under executed agreements is expected to grow to about 187,000 acre-feet by 2015.

Seawater Desalination. Metropolitan's IRP includes seawater desalination as a core local supply and supports foundational actions to lay the groundwork for accelerating seawater desalination development as needed in the future. To encourage local development, Metropolitan has signed Seawater Desalination Program ("SDP") incentive agreements with three of its member agencies: Long Beach, Municipal Water District of Orange County ("MWDOC") and West Basin Municipal Water District. The SDP agreements provide incentives to the member agencies of up to ~~\$340~~[250](#) per acre-foot when the desalinated supplies are produced. Agreement terms are for the earlier of 25 years or through 2040 and are designed to phase out if Metropolitan's rates surpass the unit cost of producing desalinated seawater. SDP agreements are subject to final approval by Metropolitan's Board after review of the complete project description and environmental documentation. These projects are currently in the development phase and collectively are anticipated to produce up to 46,000 acre-feet annually. [In addition, in October 2014, seawater desalination projects became eligible for funding under Metropolitan's Local Resources Program \("LRP"\).](#)

In November 2012, SDCWA approved a water purchase agreement with Poseidon Resources LLC (“Poseidon Resources”) for a seawater desalination project in Carlsbad (the “Carlsbad Project”) to provide a minimum of 48,000 acre-feet and a maximum of 56,000 acre-feet of desalinated supplies to SDCWA per year. The Carlsbad Project is under construction and is anticipated to be completed in ~~2016~~the fall of 2015.

Other seawater desalination projects that could provide supplies to Metropolitan’s service area are under development or consideration. Poseidon Resources is developing a 56,000 acre-feet per year plant in Huntington Beach which is currently in the permitting phase. ~~MWDOC and the Cities of Anaheim, Fullerton, and Santa Ana applied for incentive funding under Metropolitan’s Local Resources Program (“LRP”) on behalf of the project in October 2013 and Metropolitan is currently reviewing the application.~~ SDCWA is studying the potential for a seawater desalination plant in Camp Pendleton which would initially produce up to 56,000 acre-feet per year and potentially up to 168,000 acre-feet per year with a phased build out. SDCWA, in collaboration with Mexican government agencies, also is considering a 56,000 acre-feet per year facility in Rosarito Beach, Mexico. If developed, SDCWA could receive a portion of the desalinated supplies through a delivery pipeline across the international border to SDCWA. Otay Water District, located in San Diego County along the Mexico border, is separately considering the feasibility of purchasing water from an alternative seawater desalination project at the same site in Rosarito Beach. Approvals from a number of U.S. and Mexican federal agencies, along with State and local approvals, would be needed for either cross-border project to proceed.

METROPOLITAN’S WATER DELIVERY SYSTEM

Method of Delivery

Metropolitan’s water delivery system is made up of three basic components: the Colorado River Aqueduct, the California Aqueduct of the State Water Project and Metropolitan’s internal water distribution system. Metropolitan’s delivery system is integrated and designed to meet the differing needs of its member agencies. Metropolitan seeks redundancy in its delivery system to assure reliability in the event of an outage. Current system expansion and other improvements will be designed to increase the flexibility of the system. Since local sources of water are generally used to their maximum each year, growth in the demand for water is partially met by Metropolitan. Accordingly, the operation of Metropolitan’s water system is being made more reliable through the rehabilitation of key facilities as needed, improved preventive maintenance programs and the upgrading of Metropolitan’s operational control systems. See “CAPITAL INVESTMENT PLAN” in this Appendix A.

Colorado River Aqueduct. Work on the Colorado River Aqueduct commenced in 1933 and water deliveries started in 1941. Additional facilities were completed by 1961 to meet additional requirements of Metropolitan’s member agencies. The Colorado River Aqueduct is 242 miles long, starting at the Lake Havasu intake and ending at the Lake Mathews terminal reservoir. Metropolitan owns all of the components of the Colorado River Aqueduct, which include five pump plants, 64 miles of canal, 92 miles of tunnels, 55 miles of concrete conduits and 144 underground siphons totaling 29 miles in length. The pumping plants lift the water approximately 1,617 feet over several mountain ranges to Metropolitan’s service area. See “METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct” in this Appendix A.

State Water Project. The initial portions of the State Water Project serving Metropolitan were completed in 1973. State Water Project facilities are owned and operated by DWR. Twenty-nine agencies have entered into contracts with DWR to receive water from the State Water Project. See “METROPOLITAN’S WATER SUPPLY—State Water Project” in this Appendix A.

Internal Distribution System. Metropolitan’s internal water distribution system includes components that were built beginning in the 1930s and through the present. Metropolitan owns all of these components, including 14 dams and reservoirs, five regional treatment plants, over 800 miles of transmission pipelines, feeders and canals, and 16 hydroelectric plants with an aggregate capacity of 131 megawatts.

Diamond Valley Lake. Diamond Valley Lake, a man-made reservoir located southwest of the city of Hemet, California, covers approximately 4,410 acres and has capacity to hold approximately 810,000 acre-feet or 265 billion gallons of water. Diamond Valley Lake was constructed to serve approximately 90 percent of Metropolitan’s service area by gravity flow. Associated hydraulic structures consist of an inlet-outlet tower, pumps and generating facilities, a pressure control facility, connecting tunnels and a forebay. Imported water is delivered to Diamond Valley Lake during surplus periods. The reservoir provides more reliable delivery of imported water from the State Water Project and the Colorado River Aqueduct during summer months, droughts and emergencies. In addition, Diamond Valley Lake is capable of providing more than one-third of Southern California’s water needs from storage for approximately six months after a major earthquake (assuming that there has been no impairment of Metropolitan’s internal distribution network). See the table “Metropolitan’s Water Storage Capacity and Water in Storage” under “METROPOLITAN’S WATER SUPPLY—Storage Capacity and Water in Storage” in this Appendix A for the amount of water in storage at Diamond Valley Lake. Excavation at the project site began in May 1995. Diamond Valley Lake was completed in March 2000, at a total cost of \$2 billion, and was in full operation in December 2001.

Inland Feeder. The Inland Feeder is a 44-mile-long conveyance system that connects the State Water Project to Diamond Valley Lake and the Colorado River Aqueduct. The Inland Feeder provides greater flexibility in managing Metropolitan’s major water supplies and allows greater amounts of State Water Project water to be accepted during wet seasons for storage in Diamond Valley Lake. In addition, the Inland Feeder increases the conveyance capacity from the East Branch of the State Water Project by 1,000 cfs, allowing the East Branch to operate up to its full capacity. Construction of the Inland Feeder was completed in September 2009 at a total cost of \$1.14 billion.

Operations Control Center. Metropolitan’s water conveyance and distribution system operations are coordinated from the Operations Control Center (“OCC”) located in the Eagle Rock area of Los Angeles. The OCC plans, balances and schedules daily water and power operations to meet member agencies’ demands, taking into consideration the operational limits of the entire system.

Water Treatment

Metropolitan filters and disinfects water at five water treatment plants: the F.E. Weymouth Treatment Plant, the Joseph Jensen Treatment Plant, the Henry J. Mills Treatment Plant, the Robert B. Diemer Treatment Plant and the Robert A. Skinner Treatment Plant. The plants treat an average of between 1.7 billion and 2.0 billion gallons of water per day, and have a maximum capacity of approximately 2.6 billion gallons per day. Approximately 60 percent of Metropolitan’s water deliveries are treated water.

Federal and state regulatory agencies continually monitor and establish new water quality standards. New water quality standards could affect availability of water and impose significant compliance costs on Metropolitan. The Safe Drinking Water Act (“SDWA”) was amended in 1986 and again in 1996. The SDWA establishes drinking water quality standards, monitoring, public notification and enforcement requirements for public water systems. To achieve these objectives, the U.S. Environmental Protection Agency (“USEPA”), as the lead regulatory authority, promulgates national drinking water regulations and develops the mechanism for individual states to assume primary enforcement responsibilities. The California Department of Public Health (“CDPH”), formerly known as the Department of Health Services, has lead authority over California water agencies. Metropolitan continually monitors new water quality laws and regulations and frequently comments on new legislative proposals and regulatory rules.

In October 2007, Metropolitan began adding fluoride to treated water at all five of its treatment plants for regional compliance with Assembly Bill 733, enacted in 1995, which requires fluoridation of any public water supply with over 10,000 service connections in order to prevent tooth decay, subject to availability of sufficient funding. Design and construction of the fluoridation facilities at Metropolitan's five treatment plants were funded primarily by a \$5.5 million grant from the California Dental Association Foundation, in conjunction with the California Fluoridation 2010 Work Group. On August 9, 2011, four individuals filed litigation (*Foli, et al. v. Metropolitan Water District of Southern California, et al.*) in federal district court alleging deprivation of civil rights, impairment of civil rights and unfair competition based on fluoridation of Metropolitan's treated water deliveries. On April 10, 2012 the court granted Metropolitan's motion to dismiss the case without prejudice. Plaintiffs filed a first amended complaint on April 24, 2012. Metropolitan's motion to dismiss the first amended complaint was granted on January 25, 2013, dismissing the case with prejudice. On February 20, 2013, plaintiffs filed a notice of appeal to the U.S. Court of Appeals for the Ninth Circuit. ~~Plaintiffs are appealing the January 2013 order which granted Metropolitan's motion to dismiss plaintiffs' first amended complaint, as well as the April 2012 order which granted Metropolitan's motion to dismiss plaintiffs' original complaint. Plaintiffs filed their opening brief with the Ninth Circuit on June 27, 2013, and Metropolitan filed its answering brief and motion for judicial notice on August 28, 2013. Plaintiffs filed their reply brief and a request for judicial notice with the Ninth Circuit on October 10, 2013. No trial date has been set.~~ On February 19, 2015, the Ninth Circuit affirmed the district court's dismissal of the case. Plaintiffs have until March 5, 2015 to file a petition for rehearing, or 90 days from the date of the decision to file petition for a writ of certiorari.

Disinfection By-products. As part of the requirements of the SDWA, the USEPA is required to establish regulations to strengthen protection against microbial contaminants and reduce potential health risks from disinfection by-products. Disinfectants and disinfection by-products ("DBPs" and, together with disinfectants, "D/DBPs") were addressed by the USEPA in two stages. In the Stage 1 Disinfectants and Disinfection Byproducts Rule ("Stage 1 DBPR"), the maximum contaminant level ("MCL") for one of the classes of DBPs, total trihalomethanes ("TTHM"), was lowered from 100 parts per billion ("ppb") to 80 ppb. MCLs were also set for haloacetic acids ("HAA") and bromate (an ozone DBP). In addition, the Stage 1 DBPR includes a treatment requirement to remove disinfection by-product precursors. Compliance with these requirements started in January 2002. Metropolitan already satisfied these requirements for its Colorado River Water, which has lower levels of disinfection by-product precursors than State Water Project water. State Water Project water has a greater amount of disinfection by-product precursors and modifications to the treatment process have been made to meet the requirements of the Stage 1 DBPR. Longer-term D/DBP control has been achieved by switching to ozone as the primary disinfectant at the Mills, Jensen and Skinner treatment plants. Mills and Jensen treatment plants only receive water from the State Water Project. Ozone facilities at the Mills and Jensen plants began operating in October 2003 and July 2005, respectively. Skinner, Diemer and Weymouth water treatment plants receive a blend of water from the State Water Project and the Colorado River. Ozone facilities at the Skinner plant became operational in October 2010. The Diemer plant is nearing the end of construction of its ozone facilities with an online date anticipated in 2014. Construction of Weymouth ozone facilities is underway and anticipated to be complete in fiscal year 2016-17. See "CAPITAL INVESTMENT PLAN—Major Projects of Metropolitan's Capital Investment Plan" in this Appendix A. Ozone will enable these plants to reliably treat water containing higher blends of State Project water and still meet the new microbial and D/DBP standards, while also improving the aesthetics, such as taste and odor, of water delivered to consumers.

The second stage of the D/DBP Rule ("Stage 2 DBPR") was finalized in January 2006. The Stage 2 DBPR requires water systems to meet the TTHM and HAA standards at individual monitoring locations in the distribution system as opposed to a distribution system-wide average under the Stage 1 DBPR. Metropolitan does not anticipate any further capital improvements in order to meet the Stage 2 DBPR requirements.

The Interim Enhanced Surface Water Treatment Rule and the Long Term 2 Enhanced Surface Water Treatment Rule (“LT2ESWTR”) have been implemented to simultaneously provide protection against microbial pathogens while the D/DBP rules provide reduced risk from disinfection by-products. Metropolitan does not anticipate any further capital improvements in order to meet the LT2ESWTR requirements.

Perchlorate. Perchlorate, used in solid rocket propellants, munitions and fireworks, has contaminated some drinking water wells and surface water sources throughout California. Perchlorate also has been detected in Metropolitan’s Colorado River water supplies. A chemical manufacturing facility near Lake Mead in Nevada is a primary source of the contamination. Remediation efforts began in 1998 and have been successful at meeting the cleanup objectives, significantly reducing the levels of perchlorate entering into the Colorado River. CDPH has established a primary drinking water standard (i.e., an MCL) of 6 ppb for perchlorate. Current perchlorate levels in Metropolitan’s Colorado River supplies are below 2 ppb.

Chromium 6. Hexavalent chromium or chromium 6 is one of several forms of chromium that occur in natural waters in the environment. Chromium 6 is the relatively more harmful form of chromium that is regulated under the public health standard MCL of 50 ppb for “total” chromium. The California Department of Public Health filed the final regulation for chromium 6 on April 15, 2014, setting a new MCL of 10 ppb. The new MCL became effective July 1, 2014, and water utilities will be required to comply with such MCL by the end of 2015. Since monitoring began in 1998, chromium 6 in Metropolitan’s treated water has ranged from non-detect (less than 0.03 ppb) to less than 1 ppb. Metropolitan expects that the recently adopted chromium 6 regulation will not materially affect the water supply to Metropolitan or result in significant compliance costs.

Arsenic. The federal and state MCL for arsenic in drinking water is 10 ppb. Arsenic levels in Metropolitan’s treated water supplies ranged from not detected (less than 2 ppb) to 2.7 ppb in 2012, which is within the historically expected range.

Seismic Considerations

General. Although the magnitude of damages resulting from a significant seismic event are impossible to predict, Metropolitan’s water conveyance and distribution facilities are designed to either withstand a maximum probable seismic event or to minimize the potential repair time in the event of damage. The five pumping plants on the Colorado River Aqueduct have been buttressed to better withstand seismic events. Other components of the Colorado River Aqueduct are monitored for any necessary rehabilitation and repair. Metropolitan personnel and independent consultants periodically reevaluate the internal water distribution system’s vulnerability to earthquakes. As facilities are evaluated and identified for seismic retrofitting, they are prioritized, with those facilities necessary for delivering or treating water scheduled for upgrade before non-critical facilities. However, major portions of the California Aqueduct and the Colorado River Aqueduct are located near major earthquake faults, including the San Andreas Fault. A significant earthquake could damage structures and interrupt the supply of water, adversely affecting Metropolitan’s revenues and its ability to pay its obligations. Therefore, emergency supplies are stored for use throughout Metropolitan’s service area, and a six-month reserve supply of water normally held in local storage (including emergency storage in Diamond Valley Lake) provides reasonable assurance of continuing water supplies during and after such events.

Metropolitan has an ongoing surveillance program that monitors the safety and structural performance of its 14 dams and reservoirs. Operating personnel perform regular inspections that include monitoring and analyzing seepage flows and pressures. Engineers responsible for dam safety review the inspection data and monitor the horizontal and vertical movements for each dam. Major on-site inspections are performed at least twice each year. Instruments that transmit seismic acceleration time histories for

analysis any time a dam is subjected to strong motion during an earthquake are located at a number of selected sites.

In addition, Metropolitan has developed an emergency plan that calls for specific levels of response appropriate to an earthquake's magnitude and location. Included in this plan are various communication tools as well as a structured plan of management that varies with the severity of the event. Pre-designated personnel follow detailed steps for field facility inspection and distribution system patrol. Approximately 40 employees are designated to respond immediately under certain identifiable seismic events. An emergency operations center is maintained at the OCC. The OCC, which is specifically designed to be earthquake resistant, contains communication equipment, including a radio transmitter, microwave capability and a response line linking Metropolitan with its member agencies, DWR, other utilities and the State's Office of Emergency Services.

Metropolitan also maintains machine, fabrication and coating shops at its facility in La Verne, California. Several construction contracts have been completed over the last few years to upgrade and expand these shops. A total of nearly \$37 million has been invested to enhance Metropolitan's capacity to not only provide fabrication and coating services for planned rehabilitation work, maintenance activities, and capital projects, but to also perform emergency fabrication support to Metropolitan and its member agencies. Metropolitan has also maintained reimbursable agreements with DWR to perform machining, fabrication, and coating services for critical repair and rehabilitation of State Water Project facilities. These agreements have enhanced timely and cost-effective emergency response capabilities. Materials to fabricate pipe and other appurtenant fittings are kept in inventory at the La Verne site. In the event of earthquake damage, Metropolitan has taken measures to provide the design and fabrication capacity to fabricate pipe and related fittings. Metropolitan is also staffed to perform emergency repairs and has pre-qualified contractors for emergency repair needs at various locations throughout Metropolitan's service area.

State Water Project Facilities. The California Aqueduct crosses all major faults either by canal at ground level or by pipeline at very shallow depths to ease repair in case of damage from movement along a fault. State Water Project facilities are designed to withstand major earthquakes along a local fault or magnitude 8.1 earthquakes along the San Andreas Fault without major damage. Dams, for example, are designed to accommodate movement along their foundations and to resist earthquake forces on their embankments. Earthquake loads have been taken into consideration in the design of project structures such as pumping and power plants. The location of check structures on the canal allows for hydraulic isolation of the fault-crossing repair.

While the dams, canals, pump stations and other constructed State Water Project facilities have been designed to withstand earthquake forces, the critical supply of water from Northern California must traverse the Bay-Delta through hundreds of miles of varying levels of engineered levees that are susceptible to major failures due to flood and seismic risk. In the event of a failure of the Bay-Delta levees, the quality of the Bay-Delta's water could be severely compromised as salt water comes in from the San Francisco Bay. Metropolitan's supply of State Water Project water would be adversely impacted if pumps that move Bay-Delta water southward to the Central Valley and Southern California are shut down to contain the salt water intrusion. Metropolitan estimates that stored water supplies, Colorado River Aqueduct supplies and local water resources that would be available in case of a levee breach or other interruption in State Water Project supplies would meet demands in Metropolitan's service area for approximately twelve months. See "METROPOLITAN'S WATER SUPPLY—Storage Capacity and Water in Storage" in this Appendix A. Since the State and Federal governments control the Bay-Delta levees, repair of any levee failures would be the responsibility of and controlled by the State and Federal governments.

Metropolitan, in cooperation with the State Water Contractors, developed recommendations to DWR for emergency preparedness measures to maintain continuity in export water supplies and water quality during emergency events. These measures include improvements to emergency construction materials

stockpiles in the Bay-Delta, improved emergency contracting capabilities, strategic levee improvements and other structural measures of importance to Bay-Delta water export interests, including development of an emergency freshwater pathway to export facilities in a severe earthquake. DWR utilized \$12 million in fiscal year 2007-08 for initial stockpiling of rock for emergency levee repairs and development of Bay-Delta land and marine loading facilities and has identified future funding for expanded stockpiles.

Perris Dam. Perris Dam forms Lake Perris, the terminal reservoir for the State Water Project in Riverside County, with maximum capacity of approximately 130,000 acre-feet of water. DWR reported in July 2005 that seismic studies indicate that DWR's Perris Dam facility could sustain damage from moderate earthquakes along the San Jacinto or San Andreas faults due to potential weaknesses in the dam's foundation. In late 2005, DWR lowered the water level in the reservoir by about 25 feet and reduced the amount of water stored in the reservoir to about 75,000 acre-feet as DWR evaluated alternatives for repair of the dam. In December 2006, DWR completed a study identifying various repair options, began additional geologic exploration along the base of Perris Dam and started preliminary design. DWR's preferred alternative is to repair the dam to restore the reservoir to its historical level. On November 11, 2011, DWR certified the final EIR and filed a Notice of Determination stating its intent to proceed with the preferred alternative. DWR estimates that repairs will cost approximately \$141 million with commencement of construction anticipated in 2014 and completion in mid-2017. Under the original allocation of joint costs for this facility, the State would have paid approximately six percent of the repair costs. However, because of the recreational benefit this facility provides to the public, the Legislature has approved a recommendation from DWR that the State assume 32.2 percent of these repair costs. The remaining 67.8 percent of repairs costs will be paid for by the three agencies that use the water stored in Lake Perris: Metropolitan (42.9 percent), Desert Water Agency (3.0 percent) and Coachella Valley Water District (21.9 percent). See "METROPOLITAN EXPENDITURES—State Water Contract Obligations" in this Appendix A.

Security Measures

Metropolitan conducts ground and air patrols of the Colorado River Aqueduct and monitoring and testing at all treatment plants and along the Colorado River Aqueduct. Similarly, DWR has in place security measures to protect critical facilities of the State Water Project, including both ground and air patrols of the State Water Project.

Although Metropolitan has constructed redundant systems and other safeguards to ensure its ability to continually deliver water to its customers, and DWR has made similar efforts, a terrorist attack or other security breach against water facilities could materially impair Metropolitan's ability to deliver water to its customers, its operations and revenues and its ability to pay its obligations.

CAPITAL INVESTMENT PLAN

General Description

Metropolitan's current Capital Investment Plan (the "Capital Investment Plan" or "CIP") involves expansion and rehabilitation of existing facilities and construction of new facilities to meet future water demands, ensure system reliability as well as enhance operational efficiency and flexibility, and comply with water quality regulations. Metropolitan's CIP is regularly reviewed and updated. Implementation and construction of specific elements of the program are subject to Board approval, and the amount and timing of borrowings will depend upon, among other factors, status of construction activity and water demands within Metropolitan's service area. From time to time projects that have been undertaken are delayed, redesigned or deferred by Metropolitan for various reasons and no assurance can be given that a project in the CIP will be completed in accordance with its original schedule or that any project will be completed as currently planned.

Projection of Capital Investment Plan Expenditures

The table below sets forth the projected CIP expenditures in the adopted biennial budget for fiscal years 2014-15 and 2015-16, including replacement and refurbishment expenditures, by project type for the fiscal years ending June 30, 2015 through 2019. This estimate is updated bi-annually as a result of the periodic review and adoption of the capital budget by Metropolitan’s Board of Directors. See “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

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**CAPITAL INVESTMENT PLAN
PROJECTION OF EXPENDITURES^{(1) (2)}
(Fiscal Years Ended June 30 - Dollars in Thousands)**

Cost of Service	2015	2016	2017	2018	2019	Total
Conveyance & Aqueduct	\$27,193	\$22,311	\$27,168	\$46,281	\$46,119	\$169,072
Storage	12,244	12,562	1,999	-	-	26,805
Distribution	43,508	51,642	69,826	112,699	135,673	413,348
Treatment	126,149	148,652	121,390	95,124	79,270	570,585
Administrative and General	28,109	30,393	50,357	26,484	23,214	158,557
Hydroelectric	8,212	2,308	4,067	467	120	15,174
Total⁽²⁾	\$245,415	\$267,868	\$274,807	\$281,055	\$284,396	\$1,353,541

Source: Metropolitan.

- (1) Fiscal year 2014-15 through 2018-19 based on the adopted biennial budget for fiscal years 2014-15 and 2015-16. Totals are rounded.
- (2) Annual totals include replacement and refurbishment expenditures for fiscal years 2014-15 through 2018-19 of \$139 million, \$162 million, \$159 million, \$223 million, and \$250 million, respectively, for a total of \$932 million for fiscal years 2014-15 through 2018-19.

The above projections do not include amounts for contingencies, but include escalation at 2.77 percent per year for projects for which formal construction contracts have not been awarded. Additional capital costs may arise in the future as a result of, among other things, federal and State water quality regulations, project changes and mitigation measures necessary to satisfy environmental and regulatory requirements, and for additional facilities. See “METROPOLITAN’S WATER DELIVERY SYSTEM—Water Treatment” in this Appendix A.

Capital Investment Plan Financing

The CIP will require funding from debt financing (see “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A) as well as from pay-as-you-go funding. The Board has adopted an internal funding objective to fund all capital program expenditures required for replacements and refurbishments of Metropolitan facilities from current revenues. However, in order to reduce drawdowns of reserve balances and to mitigate financial risks that could occur in upcoming years, actual pay-as-you-go funding has been less than projected amounts during fiscal years 2007-08 through 2012-13. During this period, pay-as-you-go funding was reduced to \$256 million, rather than the \$521 million originally projected. For fiscal year 2013-14, the pay-as-you-go funding for the capital program was \$117 million. On April 8, 2014, Metropolitan’s Board approved a total of \$466 million for pay-as-you-go expenditures as part of the biennial budget for fiscal year 2014-15 and fiscal year 2015-16. These pay-as-you-go funds, together with funds available in the Replacement and Refurbishment Fund, are expected to fund \$513 million in CIP expenditures for fiscal year 2014-15 and fiscal year 2015-16. As in prior years, pay-as-you-go funding may be reduced or increased by the Board during the fiscal year. To limit the accumulation of cash and investments in the Replacement and Refurbishment Fund, the maximum balance in this fund at the end of each fiscal year will be \$160 million. Amounts above the \$160 million limit will be transferred to the Revenue Remainder Fund and may be used for any lawful purpose. See “METROPOLITAN REVENUES—Financial Reserve Policy” in this Appendix A. The remainder of capital program expenditures will be funded through the issuance from time to time of water revenue bonds, which are payable from Net Operating Revenues. Metropolitan’s budget assumptions for the adopted biennial budget for fiscal years 2014-15 and 2015-16 provide for the issuance of no additional water revenue bonds to fund

the CIP in fiscal years 2014-15 through 2016-17, \$40 million of water revenue bonds in fiscal year 2017-18, and \$100 million of water revenue bonds in fiscal year 2018-19.

Major Projects of Metropolitan's Capital Investment Plan

Oxidation Retrofit Facilities. The oxidation retrofit facilities program includes the design and construction of oxidation facilities and appurtenances at all of Metropolitan's treatment plants. This program is intended to allow Metropolitan to meet drinking water standards for disinfection by-products and reduce taste and odor incidents. The first phase of the oxidation retrofit program, at Metropolitan's Henry J. Mills Treatment Plant in Riverside County, was completed in 2003. Oxidation retrofit at the Joseph Jensen Treatment Plant was completed July 1, 2005. The cost for these two projects was approximately \$236.4 million. Oxidation retrofit at the Robert A. Skinner plant was substantially completed in December 2009 and operational in 2010, with follow-up work completed in June 2014. Expenditures at the Skinner plant through ~~June~~December 2014 were ~~\$243.3~~\$243.5 million. Total oxidation program costs at the Skinner plant are estimated to be \$245.5 million. Construction of the oxidation retrofit facilities at the Robert B. Diemer Treatment Plant was completed in June 2013. All testing and start-up work is planned to be complete in 2015. Program expenditures at the Diemer plant through ~~June~~December 2014 were ~~\$357.4~~\$358.9 million and the total program cost is projected to be \$370.0 million. The construction contract for the Weymouth oxidation facilities, the last Metropolitan treatment plant to be retrofitted, was awarded in June 2012. Oxidation program costs at the F.E. Weymouth plant, based upon the adopted budget, were estimated to be \$338.5 million. Due to the ongoing highly competitive bidding environment, the awarded construction contract was more than \$100 million below the budgeted amount. Expenditures at the Weymouth plant through ~~June~~December 2014 were ~~\$141.9~~\$170.5 million and completion is expected in fiscal year 2016-17. Total oxidation program costs at the F.E. Weymouth plant are estimated to be \$270.0 million.

F.E. Weymouth Treatment Plant Improvements. The F.E. Weymouth Treatment Plant was built in 1938 and subsequently expanded several times over the following 25 years. It is Metropolitan's oldest water treatment facility. Metropolitan has completed several upgrades and refurbishment/replacement projects to maintain the plant's reliability and improve its efficiency. These include power systems upgrades, a residual solids dewatering facility, refurbishment/replacement of the mechanical equipment in two of the eight flocculation and settling basins, a new plant maintenance facility, new chemical feed systems and storage tanks, replacement of the plant domestic/fire water system, seismic upgrades to the plant inlet structure, and a new chlorine handling and containment facility. Planned projects over the next several years include refurbishment of the plant's filters and settling basins, seismic retrofits to the filter buildings and administration building, and replacement of the valves used to control filter operation. The cost estimate for all prior and projected improvements at the Weymouth plant, not including the ozone facilities, is approximately \$422.1 million, with ~~\$197.7~~\$202.7 million spent through ~~June~~December 2014. Budgeted aggregate capital expenditures for improvements at the Weymouth plant for fiscal years 2014-15 and 2015-16 are \$42.8 million.

Robert B. Diemer Treatment Plant Improvements. The Robert B. Diemer Treatment Plant was built in 1963 and subsequently expanded in 1968. It is Metropolitan's second oldest water treatment facility and has a capacity to treat 520 million gallons of water a day. Several upgrades and refurbishment/replacement projects have been completed at the Diemer plant, including power system upgrades, a new residual solids dewatering facility, new vehicle and plant maintenance facilities, new chemical feed systems and storage tanks, a new chlorine handling and containment facility, construction of a roller-compacted concrete slope stabilization system and a new secondary access road. Planned projects over the next several years include refurbishment of the plant's settling basins, seismic retrofits to the filter buildings and administration building, and replacement of the valves used to control filter operation. The current cost estimate for all prior and projected improvements at the Diemer Treatment Plant, not including the ozone facilities, is approximately \$384.6 million, with ~~\$189.4~~\$197.2 million spent through ~~June~~December 2014. Budgeted

aggregate capital expenditures for improvements at the Diemer plant for fiscal years 2014-15 and 2015-16 are \$59.4 million.

Colorado River Aqueduct Facilities. Deliveries through the Colorado River Aqueduct began in 1941. Through annual inspections and maintenance activities, the performance and reliability of the various components of the Colorado River Aqueduct are regularly evaluated. A major overhaul of the pump units at the five pumping plants was completed in 1988. Refurbishment or replacement of many of the electrical system components, including the transformers, circuit breakers and motor control centers, is currently under way. Projects completed over the past 10 years include replacement of high voltage circuit breakers and transformers at the five pumping plant switchyards, refurbishment of operators and power centers on the head gates downstream of the pumping plants, refurbishment/replacement of 15 isolation/control gates, replacement of cast iron pipe and other components at over 200 outlet structures with stainless steel components, replacement of pumping plant inlet trash racks, replacement of several miles of deteriorated concrete canal liner, and replacement of the outlet gates and appurtenant electrical, mechanical, and control systems at the Copper Basin Reservoir. Additionally, many of the mechanical components at all five pumping plants will be evaluated and replaced or refurbished over the next several years. The currently projected cost estimate for all prior and planned refurbishment or replacement projects is \$468.2 million. Costs through ~~June~~December 2014 were ~~\$167.3~~169.8 million. Budgeted aggregate capital expenditures for improvements on the Colorado River Aqueduct for fiscal years 2014-15 and 2015-16 are \$53.3 million.

Distribution System – Prestressed Concrete Cylinder Pipe. Metropolitan’s distribution system (see “METROPOLITAN’S WATER DELIVERY SYSTEM” in this Appendix A) is comprised of approximately 830 miles of pipelines ranging in diameter from 30 inches to over 200 inches. 163 miles of the distribution system is made up of prestressed concrete cylinder pipe (“PCCP”). In response to PCCP failures experienced by several water agencies, Metropolitan initiated the PCCP Assessment Program in December 1996 to evaluate the condition of Metropolitan’s PCCP lines and investigate inspection and refurbishment methods. As a result, Metropolitan has identified and made repairs to several sections of PCCP. The costs for these repairs ~~to date have totaled nearly \$60~~through December 2014 were \$65.3 million. Rather than continue to make spot repairs to pipe segments, Metropolitan has initiated a long-term capital program to rehabilitate approximately 100 miles of PCCP in five pipelines. This rehabilitation, which is currently planned to consist of relining the pipelines with a steel liner, will be performed in stages to minimize delivery impacts to customers. The first PCCP line planned for relining is the Second Lower Feeder. Approximately 30 miles of this line are constructed of PCCP, with diameters ranging from 78 to 84 inches. This effort is anticipated to take 8 to 10 years to complete at a cost of approximately \$500 million. ~~Preliminary~~Final design is currently underway. Design for rehabilitation of the remaining four pipelines will be initiated over the next several years. The estimated cost to reline all 100 miles of PCCP is approximately \$2.6 billion.

Distribution System – Refurbishments and Improvements. In addition to the long-term program to rehabilitate Metropolitan’s PCCP lines, several other components of the distribution system are being refurbished and/or improved. Past and ongoing projects to ensure the reliability of the distribution system, primarily due to age, include multiple replacements or refurbishments of isolation and control valves and gates, refurbishment to pressure control and hydroelectric power facilities, and various other upgrades totaling over \$140 million since fiscal year 2000-01. The currently projected cost estimate for the prior and planned refurbishment or replacement projects is \$600 million. ~~Budgeted~~For fiscal years 2014-15 and 2015-16, ~~budgeted~~ aggregate capital expenditures for improvements on the distribution system, other than PCCP rehabilitation ~~for fiscal years 2014-15 and 2015-16~~, are \$53.4 million.

Also, as a result of the current statewide drought, Metropolitan initiated a project to enable reverse-flow through a series of existing pipelines to deliver water stored in Diamond Valley Lake to Metropolitan’s Henry J. Mills Water Treatment Plant, which has historically received only raw water from DWR’s State Water Project. Construction contracts were awarded in June and August 2014 to complete this

Draft Dated 2/26/15

effort. The total estimated cost for this project is approximately \$37 million. It is planned to be completed by May 2015.

GOVERNANCE AND MANAGEMENT

Board of Directors

Metropolitan is governed by a 37-member Board of Directors. Each member public agency is entitled to have at least one representative on the Board, plus an additional representative for each full five percent of the total assessed valuation of property in Metropolitan's service area that is within the member public agency. Changes in relative assessed valuation do not terminate any director's term. Accordingly, the Board may, from time to time, have more than 37 directors.

The Board includes business, professional and civic leaders. Directors serve on the Board without compensation from Metropolitan. Voting is based on assessed valuation, with each member agency being entitled to cast one vote for each \$10 million or major fractional part of \$10 million of assessed valuation of property within the member agency, as shown by the assessment records of the county in which the member agency is located. The Board administers its policies through the Metropolitan Water District Administrative Code (the "Administrative Code"), which was adopted by the Board in 1977. The Administrative Code is periodically amended to reflect new policies or changes in existing policies that occur from time to time.

Management

Metropolitan's day-to-day management is under the direction of its General Manager, who serves at the pleasure of the Board, as do Metropolitan's General Counsel, General Auditor and Ethics Officer. Following is a biographical summary of Metropolitan's principal executive officers.

Jeffrey Kightlinger, General Manager – Mr. Kightlinger was appointed as General Manager in February 2006, leaving the position of General Counsel, which he had held since February 2002. Before becoming General Counsel, Mr. Kightlinger was a Deputy General Counsel and then Assistant General Counsel, representing Metropolitan primarily on Colorado River matters, environmental issues, water rights and a number of Metropolitan's water transfer and storage programs. Prior to joining Metropolitan in 1995, Mr. Kightlinger worked in private practice representing numerous public agencies including municipalities, redevelopment agencies and special districts. Mr. Kightlinger earned his bachelor's degree in history from the University of California, Berkeley, and his law degree from Santa Clara University.

Marcia Scully, General Counsel – Ms. Scully assumed the position of General Counsel in March 2012. She previously served as Metropolitan's Interim General Counsel from March 2011 to March 2012. Ms. Scully joined Metropolitan in 1995, after a decade of private law practice, providing legal representation to Metropolitan on construction, employment, Colorado River and significant litigation matters. From 1981 to 1985 she was assistant city attorney for the City of Inglewood. Ms. Scully served as president of University of Michigan's Alumnae Club of Los Angeles and is a recipient of the 1996 State Bar of California, District 7 President's Pro Bono Service Award and the Southern California Association of Non-Profit Housing Advocate of the Year Award. She is also a member of the League of Women Voters for Whittier and was appointed for two terms on the City of Whittier's Planning Commission, three years of which were served as chair. Ms. Scully earned a bachelor's degree in liberal arts from the University of Michigan, a master's degree in urban planning from Wayne State University and law degree from Loyola Law School.

Gerald C. Riss, General Auditor – Mr. Riss was appointed as Metropolitan's General Auditor in July 2002 and is responsible for the independent evaluation of the policies, procedures and systems of control throughout Metropolitan. Mr. Riss is a certified fraud examiner, certified financial services auditor and certified risk professional with more than 25 years of experience in accounting, audit and risk management. Prior to joining Metropolitan, Mr. Riss was Vice President and Assistant Division Head of Risk Management Administration at United California Bank/Bank of the West. He also served as Senior Vice President,

director of Risk Management and General Auditor of Tokai Bank of California from 1988 until its reorganization as United California Bank in 2001. He earned a bachelor's degree in accounting and master's degree in business administration from Wayne State University in Detroit, Michigan.

Deena Ghaly, Ethics Officer – Ms. Ghaly was appointed Ethics Officer in November 2012. Ms. Ghaly joined Metropolitan with over 20 years of legal and ethics-related experience. Prior to joining Metropolitan, she served as an administrative law judge for the California Office of Administrative Hearings. She previously was head of enforcement and general counsel for the Los Angeles City Ethics Commission, which administers and enforces the laws regarding campaign contributions, lobbying, and government ethics for the city of Los Angeles. Before moving to Southern California in 2001, Ms. Ghaly lived and worked in New York City, where she headed the labor department in the general counsel's office of a large city agency. Licensed to practice law in California, New York and New Jersey, Ms. Ghaly is knowledgeable in workplace investigations, government ethics, regulatory affairs, and labor and employment matters. She has lectured throughout the nation on various topics, including parallel criminal and administrative prosecution, due process in administrative procedures, and effective internal investigations. Ms. Ghaly earned a bachelor's degree in philosophy from Wellesley College in Massachusetts and a law degree from Cornell Law School.

Gary Breaux, Assistant General Manager/Chief Financial Officer – Mr. Breaux has had extensive experience working for local governments since 1983. From 1994 until joining Metropolitan in October 2011, he served as Director of Finance for East Bay Municipal Utility District (“EBMUD”). At EBMUD, he was responsible for all financial areas, including treasury operations, debt management, rates, internal audit, accounting and reporting, risk management and customer and community services. Prior to joining EBMUD, he was Director of Finance for the City of Oakland, California. A native of Colorado, Mr. Breaux received a Bachelor of Science degree in Business from the University of Colorado in 1977 and a master's degree in Public Administration in 1987 from Virginia Commonwealth University.

Debra Man, Assistant General Manager/Chief Operating Officer – Ms. Man was appointed to this position in December 2003. Ms. Man has worked at Metropolitan since 1986, beginning as an engineer and advancing to Chief of the Planning and Resources Division. As Chief of Planning and Resources she was responsible for major initiatives adopted by Metropolitan's Board, such as the Integrated Water Resources Plan, rate structure, and facility plans for expansion of Metropolitan's distribution system. In 1999, she was appointed as Vice President of Water Transfers and Exchanges, responsible for securing water supplies through agreements and partnerships with other water and agricultural interests in San Joaquin Valley and Southern California and demonstrating Metropolitan's water supply reliability in compliance with current laws. Ms. Man is a registered professional civil engineer in California and Hawaii. She has a master's degree in civil/environmental engineering from Stanford University and a bachelor's degree in civil engineering from the University of Hawaii.

Roger Patterson, Assistant General Manager/Strategic Initiatives – Mr. Patterson was appointed Assistant General Manager in March 2006. He is responsible for overseeing water supply and planning issues, including the Colorado River and State Water Project. He previously served as a consultant to Metropolitan on Colorado River issues. Mr. Patterson was the director of the Nebraska Department of Natural Resources from 1999 to 2005, where he was responsible for water administration, water planning, flood-plain delineation, dam safety and the state databank. Prior to his work in Nebraska, Mr. Patterson spent 25 years with the Bureau of Reclamation, retiring from the Bureau as the Regional Director for the Mid-Pacific Region. He is a registered professional engineer in Nebraska and Colorado, and earned bachelor's and master's degrees in engineering from the University of Nebraska.

Gilbert F. Ivey, Assistant General Manager/Chief Administrative Officer – Mr. Ivey is the Chief Administrative Officer and is responsible for human resources, real property management, strategic land development and Metropolitan's small business program. Mr. Ivey has been with Metropolitan for 40 years, starting as a summer trainee in the Engineering Division. He has held various positions in Finance,

Right-of-Way and Land, Operation, Human Resources and Executive Offices. He earned a bachelor's degree in business administration from California State University, Dominguez Hills and holds various professional designations and certifications in management from Pepperdine University and the University of Southern California.

Dee Zinke, Deputy General Manager/External Affairs – Ms. Zinke is responsible for Metropolitan's communications, outreach, education and legislative matters. She joined Metropolitan in 2009 as Manager of the Legislative Services Section. Before coming to Metropolitan, Ms. Zinke was the Manager of Governmental and Legislative Affairs at the Calleguas Municipal Water District for nearly 10 years, where she received recognition for her significant contributions to the Association of California Water Agencies, the Ventura County Special Districts Association and the Association of Water Agencies of Ventura County. During her tenure at Calleguas, she was named Chair of the Ventura County Watersheds Coalition and appointed by then-Secretary of Resources Mike Chrisman to the State Watershed Advisory Committee, a post she still holds today. Prior to her public service, she worked in the private sector as the Executive Officer and Senior Legislative Advocate for Building Industry Association of Greater Los Angeles and Ventura Counties and as Director of Communications for E-Systems, a defense contractor specializing in communication, surveillance and navigation systems in Washington, D.C. Ms. Zinke holds a Bachelor of Arts degree in Communication and Psychology from Virginia Polytechnic Institute and State University.

Employee Relations

The total number of regular full-time Metropolitan employees on ~~October 15, 2014~~ was ~~1,768~~, 1,750, of whom ~~1,238~~, 1,220 were represented by AFSCME Local 1902, 91 by the Supervisors Association, 288 by the Management and Professional Employees Association and 135 by the Association of Confidential Employees. The remaining 16 employees are unrepresented. The four bargaining units represent 99 percent of Metropolitan's employees. The Memorandum of Understanding ("MOU") with the Association of Confidential Employees covers the period January 1, 2011 through December 31, 2015. The MOUs with the Management and Professional Employees Association and with AFSCME Local 1902 cover the period January 1, 2011 to December 31, 2016. The MOU with the Supervisors Association covers the period September 13, 2011 to December 31, 2016.

Risk Management

Metropolitan is exposed to various risks of loss related to the design, construction, treatment and delivery of water. With the assistance of third party claims administrators, Metropolitan is self-insured for liability, property and workers' compensation. Metropolitan self-insures the first \$25 million per liability occurrence, with commercial liability coverage of \$75 million in excess of the self-insured retention. The \$25 million self-insured retention is maintained as a separate restricted reserve. Metropolitan is also self-insured for loss or damage to its property, with the \$25 million self-insured retention also being accessible for emergency repairs and Metropolitan property losses. In addition, Metropolitan obtains other excess and specialty insurance coverage such as directors' and officers' liability, fiduciary liability and aircraft hull and liability coverage.

Metropolitan self-insures the first \$5 million for workers' compensation with excess coverage of \$50 million. Metropolitan separately funds remaining workers' compensation and general liability claims arising from the Diamond Valley Lake and early portions of the Inland Feeder construction projects, which were insured through Owner Controlled Insurance Programs ("OCIPs"). The OCIPs for those projects have been concluded. The costs to settle and close the remaining claims for the Diamond Valley Lake and Inland Feeder construction projects are estimated to be \$1 million and \$300,000, respectively.

The self-insurance retentions and reserve levels currently maintained by Metropolitan may be modified by Metropolitan's Board at its sole discretion.

METROPOLITAN REVENUES

General

Until water deliveries began in 1941, Metropolitan's activities were, by necessity, supported entirely through the collection of *ad valorem* property taxes. Since the mid-1980s, water sales revenues have provided approximately 75 to 85 percent of total revenues and *ad valorem* property taxes have accounted for about 10 percent of revenues, declining to ~~five~~six percent of revenues in fiscal year ~~2012-13~~2013-14. The remaining revenues have been derived principally from the sale of hydroelectric power, interest on investments and additional revenue sources (water standby charges and availability of service charges) beginning in 1993. *Ad valorem* taxes do not constitute a part of Operating Revenues and are not available to make payments with respect to the water revenue bonds issued by Metropolitan.

Generally, Metropolitan has constitutional and statutory authority, as well as voter authorization, to levy *ad valorem* property taxes to pay its outstanding general obligation bonds and to satisfy its State Water Contract obligations. Beginning in fiscal year 1990-91, *ad valorem* taxes ~~were~~have been applied solely to pay annual debt service on Metropolitan's general obligation bonds and a small portion of State Water Contract obligations, pursuant to requirements in the Act that limit property tax collections to the amount necessary to pay annual debt service on Metropolitan's general obligation bonds plus the portion of its State Water Contract payment obligation attributable to the debt service on State general obligation bonds for facilities benefitting Metropolitan- outstanding as of 1990-91. Under this requirement, Metropolitan's *ad valorem* property tax revenue would gradually decrease, as the bonds are retired. However, the Act permits Metropolitan to set aside the prescribed reductions in the tax rate if the Board, following a public hearing with 10 days' prior written notice to the Speaker of the California Assembly and the President pro Tempore of the Senate, finds that revenue in excess of the restriction is "essential to the fiscal integrity of the district." On June 11, 2013, following such public hearing, the Board adopted a resolution finding that maintaining the *ad valorem* tax rate for fiscal year 2013-14 at the fiscal year 2012-13 tax rate was essential to the fiscal integrity of Metropolitan and suspending the tax limit clause in the Act. On August 19, 2014, following the required hearing and notice, the Board adopted a resolution finding that continuing the *ad valorem* tax rate at the rate levied for fiscal year 2013-14 was essential to the fiscal integrity of Metropolitan and suspending the tax limit clause in the Act. Factors considered by the Board included current and future State Water Contract payment obligations and a balancing of proper mechanisms for funding them, the appropriate mix of property taxes and water rates and charges to enhance Metropolitan's fiscal stability and a fair distribution of costs across Metropolitan's service area. On August 20, 2013 and August 19, 2014, the Board adopted resolutions levying taxes for fiscal years 2013-14 and 2014-15, respectively, at the tax rate levied for fiscal year 2012-13 (0.0035 percent of assessed valuation, excluding annexation levies).

The basic rate for untreated water for domestic and municipal uses is \$593 per acre-foot for Tier 1 water, effective January 1, 2014. This rate ~~will decrease~~ decreased to \$582 effective January 1, 2015 and will increase to \$594 effective January 1, 2016. See "—Rate Structure" and "—Water Rates by Water Category" below. The *ad valorem* tax rate for Metropolitan purposes has gradually been reduced from a peak equivalent rate of 0.1250 percent of full assessed valuation in fiscal year 1945-46 to 0.0035 percent of full assessed valuation for fiscal year 2014-15. The rates charged by Metropolitan represent the wholesale cost of Metropolitan water to its member agencies, and not the cost of water to the ultimate consumer. Metropolitan does not exercise control over the rates charged by its member agencies or their subagencies to their customers.

Summary of Receipts by Source

The following table sets forth Metropolitan's sources of receipts for the five fiscal years ended June 30, 2014. The table provides cash basis information, which is unaudited. Audited financial statements for the fiscal years ended June 30, 2014 and June 30, 2013 are provided in Appendix B - "THE

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR ~~FISCAL YEAR~~THE SIX MONTHS ENDED JUNE 30, DECEMBER 31, 2014 AND JUNE 30, 2013 and 2013 (UNAUDITED)."

SUMMARY OF RECEIPTS BY SOURCE⁽¹⁾
Fiscal Years Ended June 30
(Dollars in Millions)

	2010	2011	2012	2013	2014
Water Sales ⁽²⁾	\$1,011.1	\$995.6	\$1,062.5	\$1,250.9	\$1,455.3
Net Tax Collections ⁽³⁾	97.3	88.0	90.1	96.5	98.4
Additional Revenue Sources ⁽⁴⁾	135.3	153.5	167.1	174.2	179.8
Interest on Investments	26.7	18.9	17.8	11.7	14.8
Hydroelectric Power Sales	18.8	22.1	31.0	26.3	15.2
Other Collections & Trust Funds ⁽⁵⁾	<u>9.1</u>	<u>61.0</u>	<u>53.6</u>	<u>19.9</u>	<u>20.7</u>
Total Receipts	\$1,298.3	\$1,339.1	\$1,422.1	\$1,579.5	\$1,784.2

Source: Metropolitan.

- (1) Does not include any proceeds from the sale of bonded indebtedness.
- (2) Gross receipts in each year are for sales in the twelve months ended April 30 of such year. Water sales revenues include revenues from water wheeling and exchanges. See "METROPOLITAN REVENUES—Wheeling and Exchange Charges" in this Appendix A. Includes \$25.7 million in fiscal year 2010-11, from the Calleguas Municipal Water District related to termination of the Las Posas water storage program.
- (3) *Ad valorem* taxes levied by Metropolitan are applied solely to the payment of outstanding general obligation bonds of Metropolitan and to State Water Contract obligations.
- (4) Includes receipts derived from water standby charges, readiness-to-serve, and capacity charges. See "—Rate Structure" and "—Additional Revenue Components" below.
- (5) In fiscal year 2010-11 includes \$10.8 million reimbursement from State Proposition 13 bond funds and \$28.2 million from the termination of the Las Posas water storage program. In fiscal year 2011-12, includes \$27.5 million from CVWD for delivery of 105,000 acre-feet under an exchange agreement between Metropolitan and CVWD.

Revenue Allocation Policy and Tax Revenues

The Board determines the water revenue requirement for each fiscal year after first projecting the *ad valorem* tax levy for that year. The tax levy for any year is subject to limits imposed by the State Constitution, the Act and Board policy and to the requirement under the State Water Contract that in the event that Metropolitan fails or is unable to raise sufficient funds by other means, Metropolitan must levy upon all property within its boundaries not exempt from taxation a tax or assessment sufficient to provide for all payments under the State Water Contract. See "HISTORICAL AND PROJECTED REVENUES AND EXPENSES" in this Appendix A. From fiscal year 1990-91 through 2012-13, and pursuant to statute, the tax levy was set to not exceed the amount needed to pay debt service on Metropolitan's general obligation bonds and to satisfy a portion of Metropolitan's State Water Contract obligation. However, Metropolitan has authority to impose a greater tax levy to pay debt service on Metropolitan's general obligation bonds and to satisfy Metropolitan's State Water Contract obligations in full if, following a public hearing, the Board finds that such revenue is essential to its fiscal integrity. On June 11, 2013 and August 19, 2014, the Board suspended the tax limit clause in the Act and, for fiscal years 2013-14 and 2014-15, maintained the fiscal year 2012-13 *ad valorem* tax rate. See "METROPOLITAN REVENUES—General" above. Any deficiency between tax levy receipts and Metropolitan's share of debt service obligations on general obligation bonded debt issued by the State is expected to be paid from Operating Revenues, as defined in the Master Resolution.

Water Sales Revenues

Authority. Water rates are established by the Board and are not subject to regulation or approval by the Public Utilities Commission of California or by any other local, State or federal agency. In accordance with the Act, water rates must be uniform for like classes of service. Metropolitan has provided three classes of water service: (1) full service; (2) replenishment (discontinued effective December 31, 2012); and (3) interim agricultural (discontinued effective December 31, 2012). See “—Classes of Water Service” below.

No member agency of Metropolitan is obligated to purchase water from Metropolitan. However, 24 of Metropolitan’s 26 member agencies entered into voluntary water supply purchase orders for water purchases, which had initial 10-year terms ending December 31, 2012. Twenty-two of such purchase orders have been extended to December 31, 2014, as described under “—Member Agency Purchase Orders” below. On November 18, 2014, the Board approved the terms of new 10 year voluntary water supply purchase orders effective January 1, 2015 through December 31, 2024. Consumer demand and locally supplied water vary from year to year, resulting in variability in water sales revenues. Metropolitan uses its financial reserves and budgetary tools to manage the financial impact of the variability in revenues due to fluctuations in annual water sales. See “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

Payment Procedure. Water is delivered to the member agencies on demand and is metered at the point of delivery. Member agencies are billed monthly and a late charge of one percent of the delinquent payment is assessed for a payment that is delinquent for no more than five business days. A late charge of two percent of the amount of the delinquent payment is charged for a payment that is delinquent for more than five business days for each month or portion of a month that the payment remains delinquent. Metropolitan has the authority to suspend service to any member agency delinquent for more than 30 days. Delinquencies have been rare; in such instances late charges have been collected. No service has been suspended because of delinquencies.

Water Sales. The following table sets forth the acre-feet of water sold and water sales (including sales from water wheeling and exchanges) for the five fiscal years ended June 30, 2014. Water sales revenues of Metropolitan for the two fiscal years ended June 30, 2014 and June 30, 2013, respectively, on an accrual basis, are shown in Appendix B - “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR ~~FISCAL YEARS~~THE SIX MONTHS ENDED ~~JUNE 30, DECEMBER 31,~~ 2014 ~~AND JUNE 30, 2013~~ and 2013 (UNAUDITED).”

SUMMARY OF WATER SOLD AND WATER SALES Fiscal Years Ended June 30

<u>Year</u>	<u>Acre-Feet⁽¹⁾ Sold</u>	<u>Water Sales⁽⁴⁾ (in millions)</u>	<u>Dollars Per Acre Foot⁽⁵⁾</u>	<u>Average Dollars Per 1,000 Gallons</u>
2010	1,857,564	\$1,011.1	\$544	\$1.67
2011 ⁽²⁾	1,632,277	995.6	610	1.87
2012 ⁽³⁾	1,676,855	1,062.5	634	1.94
2013	1,856,685	1,282.5	691	2.12
2014	2,043,720	1,484.6	726	2.23

Source: Metropolitan.

- (1) Year ended April 30 for fiscal years 2010-2012, water sales recorded on a cash-basis. Beginning fiscal year 2012-13 water sales recorded on an accrual basis, with water sales for the fiscal year ended June 30.

- (2) Includes the sale of 34,519 acre-feet and the receipt of \$25.7 million from the Calleguas Municipal Water District related to termination of the Las Posas water storage program.
- (3) Includes 225,000 acre-feet of replenishment sales.

[\(Footnotes continued on next page\)](#)

- (4) Water Sales in fiscal years 2009-10 through 2011-12 are recorded on a cash basis for sales in the twelve months ended April 30 of such year, with rates and charges invoiced in May and payable by the last business day of June of each year. Water sales for fiscal years 2012-13 and 2013-14 are recorded on a modified accrual basis for sales in the twelve months ended June 30 of such year, with rates and charges recorded as revenues in the same months as invoiced. Includes revenues from water wheeling and exchanges. See “METROPOLITAN REVENUES—Wheeling and Exchange Charges” in this Appendix A.
- (5) Gross water sales divided by acre-feet sold. An acre-foot is approximately 326,000 gallons. See table entitled “SUMMARY OF WATER RATES” under “-Water Rates by Water Category” below for a description of water rates and classes of service.

Rate Structure

The following rates and charges are elements of Metropolitan’s rate structure for full service water deliveries:

Tier 1 and Tier 2 Water Supply Rates. The Tier 1 and Tier 2 Water Supply Rates are designed to recover Metropolitan’s water supply costs. The Tier 2 Supply Rate is designed to reflect Metropolitan’s costs of acquiring new supplies. Member agencies are charged the Tier 1 or Tier 2 Water Supply Rate for water purchases, as described under “-Member Agency Purchase Orders” below.

System Access Rate. The System Access Rate is intended to recover a portion of the costs associated with the conveyance and distribution system, including capital, operating and maintenance costs. All users (including member agencies and third-party entities wheeling or exchanging water; see “-Wheeling and Exchange Charges” below) of the Metropolitan system pay the System Access Rate.

Water Stewardship Rate. The Water Stewardship Rate is charged on a dollar per acre-foot basis to collect revenues to support Metropolitan’s financial commitment to conservation, water recycling, groundwater recovery and other demand management programs approved by the Board. The Water Stewardship Rate is charged for every acre-foot of water conveyed by Metropolitan because all users of Metropolitan’s system benefit from the system capacity made available by investments in demand management programs.

System Power Rate. The System Power Rate is charged on a dollar per acre-foot basis to recover the cost of power necessary to pump water from the State Water Project and Colorado River through the conveyance and distribution system for Metropolitan’s member agencies. The System Power Rate is charged for all Metropolitan supplies. Entities wheeling non-Metropolitan water supplies will pay the actual cost of power to convey water on the State Water Project, the Colorado River Aqueduct or the Metropolitan distribution system, whichever is applicable.

Treatment Surcharge. Metropolitan charges a treatment surcharge on a dollar per acre-foot basis for treated deliveries. The treatment surcharge is set to recover the cost of providing treated water service, including capital and operating cost.

Delta Supply Surcharge. On April 13, 2010, Metropolitan’s Board adopted a Delta Supply Surcharge of \$51 and \$58 per acre-foot, effective January 1, 2011 and January 1, 2012, respectively, and applicable to all Tier 1, Interim Agricultural Water Program and Replenishment water rates. The Delta Supply Surcharge was designed to recover the additional supply costs Metropolitan faces as a result of pumping restrictions associated with the USFWS biological opinion on Delta smelt and other actions to protect endangered fish species. The Delta Surcharge was intended to remain in effect until a long-term solution for the Bay-Delta is achieved. Metropolitan anticipated that the Delta Supply Surcharge would be

reduced or suspended as interim Delta improvements ease pumping restrictions, resulting in lower costs for additional supplies. On April 10, 2012, the Board suspended the Delta Supply Surcharge, effective January 1, 2013.

The amount of each of these rates since September 1, 2009, is shown in the table entitled “SUMMARY OF WATER RATES” under “—Water Rates by Water Category” below.

Litigation Challenging Rate Structure

SDCWA filed *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.* on June 11, 2010. The complaint alleges that the rates adopted by the Board on April 13, 2010, which became effective January 1, 2011 and January 1, 2012, misallocate State Water Contract costs to the System Access Rate and the System Power Rate, and thus to charges for transportation of water, and that this results in an overcharge to SDCWA by at least \$24.5 million per year. The complaint alleges that all State Water Project costs should be allocated instead to Metropolitan’s Supply Rate, even though under the State Water Contract Metropolitan is billed separately for transportation, power and supply costs. It states additionally that Metropolitan will overcharge SDCWA by another \$5.4 million per year by including the Water Stewardship Rate in transportation charges. Eight of Metropolitan’s member agencies (the Cities of Glendale, Los Angeles and Torrance, Municipal Water District of Orange County and Foothill, Las Virgenes, Three Valleys and West Basin Municipal Water Districts) answered the complaint in support of Metropolitan. IID joined the litigation in support of SDCWA’s challenge to Metropolitan’s charges for transportation of water, but withdrew and dismissed all claims against Metropolitan with prejudice on October 30, 2013.

The complaint requested a court order invalidating the rates and charges adopted April 13, 2010, and that Metropolitan be mandated to allocate costs associated with State Water Project supplies and the Water Stewardship Rate to water supply charges and not to transportation charges. Rates in effect in prior years are not challenged in this lawsuit. Metropolitan contends that its rates are reasonable, equitably apportioned among its member agencies and lawful, and were adopted under a valid rate structure and cost of service approach developed in a multi-year collaborative process with its member agencies that has been in place since 2002. Nevertheless, to the extent that a court invalidates Metropolitan’s adopted rates and charges, Metropolitan will be obligated to reconsider and modify rates and charges to comply with any court rulings related to Metropolitan’s rates. While components of the rate structure and costs may change as a result of any such rulings, Metropolitan expects that aggregate rates and charges would still recover Metropolitan’s cost of service. As such, revenues would not be affected. If Metropolitan’s rates are revised in the manner proposed by SDCWA in the complaint, other member agencies may pay higher rates unless other actions are taken by the Board.

SDCWA filed its First Amended Petition for Writ of Mandate and Complaint on October 27, 2011, adding five new claims to this litigation, two of which were eliminated from the case on January 4, 2012. The three remaining new claims are for breach of the water exchange agreement between Metropolitan and SDCWA (described herein under “METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct—*Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*”) based on allegedly illegal calculation of rates; improper exclusion of SDCWA’s payments under this exchange agreement from calculation of SDCWA’s preferential rights to purchase Metropolitan supplies (see “—Preferential Rights” below); and illegality of “rate structure integrity” provisions in conservation and local resources incentive agreements between Metropolitan and SDCWA. Such “rate structure integrity” provisions permit the Board to terminate incentives payable under conservation and local resources incentive agreements between Metropolitan and a member agency due to certain actions by the member agency to challenge the rates that are the source of incentive payments. In June 2011, Metropolitan’s Board authorized termination of two incentive agreements with SDCWA under the “rate structure integrity” provisions in such agreements after SDCWA filed its initial complaint challenging Metropolitan’s rates. SDCWA filed a

Second Amended Petition for Writ of Mandate and Complaint on April 17, 2012, which contains additional allegations but no new causes of action.

On June 8, 2012, SDCWA filed a new lawsuit challenging the rates adopted by Metropolitan on April 10, 2012 and effective on January 1, 2013 and January 1, 2014. See “–Rate Structure” above and “–Water Rates by Water Category” below for a description of Metropolitan’s water rate structure and the rates and charges adopted on April 10, 2012. The complaint contains allegations similar to those in the Second Amended Petition for Writ of Mandate and Complaint and new allegations asserting that Metropolitan’s rates, adopted in April 2012, violate Proposition 26. See “–California Ballot Initiatives” below for a description of Proposition 26. Metropolitan contends that its rates adopted on April 10, 2012 are reasonable, equitably apportioned among its member agencies and lawful and were adopted under a valid rate structure and cost of service approach. Ten of Metropolitan’s member agencies (the eight member agency parties to SDCWA’s first lawsuit, Eastern Municipal Water District and Western Municipal Water District of Riverside County) answered the complaint in support of Metropolitan and IID joined the litigation in support of SDCWA.

SDCWA filed a Third Amended Petition for Writ of Mandate and Complaint on January 23, 2013, to add new allegations that Metropolitan’s rates adopted in April 2010 did not meet the requirements of Proposition 26, approved by California voters in November 2010. The court granted Metropolitan’s motion to strike allegations relating to Proposition 26 on March 29, 2013, expressly ruling that SDCWA may not allege a violation of Proposition 26 in its challenge to the rates adopted in April 2010. This ruling does not affect SDCWA’s separate challenge to Metropolitan’s rates adopted in April 2012, which also includes Proposition 26 allegations.

Trial of the first phase of both lawsuits before the Superior Court of California, County of San Francisco (Case Nos. CPF-10-510830 and CPF-12-512466) concluded January 23, 2014. On April 24, 2014, the court issued its “Statement of Decision on Rate Setting Challenges,” determining that SDCWA prevailed on two of its claims and that Metropolitan prevailed on the third claim. Specifically, the court found that there was not sufficient evidence to support Metropolitan’s inclusion in its transportation rates, and hence in its wheeling rate, of either (1) payments it makes to the California Department of Water Resources for the State Water Project, or (2) all of the costs incurred by Metropolitan for conservation and local water supply development programs recovered through the Water Stewardship Rate. The trial court decision stated that the System Access Rate, System Power Rate, Water Stewardship Rate and wheeling rate violate specified statutes and the common law and such rates effective in 2013 and 2014 violate Proposition 26. The court found that SDCWA failed to prove its “dry-year peaking” claim that Metropolitan’s rates do not adequately account for variations in member agency purchases. SDCWA’s claims asserting breach of the Exchange Agreement and miscalculation of preferential rights will be tried in a second phase of the case. ~~The court has~~ Trial is currently scheduled ~~a case management conference for December 2, 2014. The final judgment in the cases will be subject to appeal. for March 30 and April 1-2, 2015.~~ Metropolitan is unable to assess at this time the likelihood of success of this litigation, any possible appeal or any future claims.

Due to SDCWA’s litigation challenging Metropolitan’s rates, as of ~~September 30,~~ December 31, 2014, Metropolitan held ~~\$148.159~~ million in its financial reserves pursuant to the exchange contract between Metropolitan and SDCWA. See “–Financial Reserve Policy” below. Amounts held pursuant to the Exchange Agreement will continue to accumulate based on the quantities of exchange water that Metropolitan provides to SDCWA and the amount of charges disputed by SDCWA. Amounts held pursuant to the Exchange Agreement are transferable to SDCWA to pay any amounts awarded by the court in the event SDCWA prevails in its claim for breach of the Exchange Agreement.

In May 2014, SDCWA filed a new lawsuit asserting essentially the same rate claims and breach of contract claim in connection with the Board’s April 2014 rate adoption. Metropolitan filed its answer on

June 30, 2014. Metropolitan is unable to assess at this time the likelihood of success of this case, any possible appeal or any future claims.

Member Agency Purchase Orders

Purchase Orders are voluntary agreements that determine the amount of water that a member agency can purchase at the Tier 1 Supply Rate. In 2001, twenty-four of Metropolitan's 26 member agencies executed purchase orders for an aggregate of 12.5 million acre-feet of water over the ten years ending December 31, 2012. On November 8, 2011, Metropolitan's Board authorized the General Manager to execute a withdrawal of the City of Compton's purchase order committing to purchase 33,720 acre-feet over the original ten-year period. The withdrawal was effective January 1, 2003. On October 10, 2012, the Board authorized the General Manager to execute an amended and restated purchase order to provide a two-year extension of existing member agency purchase orders, previously set to expire on December 31, 2012. Twenty-two of the 23 remaining purchase orders were extended to December 31, 2014. As of February 1, 2014, all purchase order commitments were met.

~~The current rate structure provides for a member agency's agreement to purchase water from Metropolitan by means of a voluntary purchase order.~~ On November 18, 2014, the Board approved the terms for purchase orders with a ten year term to be effective from January 1, 2015 through December 31, 2024, and authorized the General Manger to execute those purchase orders. In consideration of executing its purchase order, each member agency that ~~executed~~ executes a purchase order and whose purchase order is in effect ~~is~~ will be allowed to purchase up to 90 percent of its base amount at the Tier 1 Water Supply Rate in any fiscal year during the term of the purchase order; ~~and its.~~ Member agencies may choose a base amount will be the greater of (1) its ~~the~~ highest firm demand for Metropolitan water in any fiscal year from 1989-90 through 2001-02 or (2) its ten year rolling average of firm demand for Metropolitan water purchases during the 13-year period of fiscal year 1990 through fiscal year 2002, or (2) the highest year purchases in the most recent 12-year period of fiscal year 2003 through fiscal year 2014. Amounts purchased by such agencies over the applicable base amount will be priced at the Tier 2 Water Supply Rate. See “—Rate Structure—*Tier 1 and Tier 2 Water Supply Rates*” above. Member agencies that accrue a cumulative Tier 2 obligation by virtue of exceeding their Tier 1 maximum at the end of year five of the purchase order will pay their Tier 2 obligation annually. Otherwise, any obligation to pay the Tier 2 Supply Rate will be calculated over the ten-year period, consistent with the calculation of any purchase order commitment obligation. Member agencies that do not have purchase orders in effect are subject to Tier 2 Water Supply Rates for amounts exceeding 60 percent of their base amount (equal to the member agency's highest fiscal year demand between 1989-90 and 2001-02) annually.

Under each purchase order, a member agency agrees to purchase, over the term of the contract, an amount of water equal to at least 60 percent of ~~its highest firm demand for Metropolitan water in any fiscal year from 1989-90 through 2001-02~~ the chosen base period demand multiplied by the number of years in the contract. Member agencies are allowed to vary their purchases from year to year, but a member agency will be obligated to pay for the full amount committed under the purchase order, even if it does not take its full purchase order commitment by the end of the contract period.

~~Twenty four of Metropolitan's 26 member agencies executed purchase orders for an aggregate of 12.5 million acre feet of water over the ten years ending December 31, 2012. On November 8, 2011, Metropolitan's Board authorized the General Manager to execute a withdrawal of the City of Compton's Purchase Order committing to purchase 33,720.6 acre feet over the original ten year period. The withdrawal was effective January 1, 2003. This lowered Compton's Tier 1 limit as if its Purchase Order had not been executed and Compton will pay the Tier 2 Supply Rate on any future water purchases over the lower limit.~~

~~On October 10, 2012, Metropolitan's Board authorized the General Manager to execute an amended and restated purchase order to provide a two year extension of existing member agency purchase orders,~~

~~previously set to expire on December 31, 2012. Twenty-two of the 23 remaining purchase orders were extended to December 31, 2014. As of February 1, 2014, all purchase order commitments were met. Extension or replacement of member agency purchase orders is scheduled to be addressed in late 2014.~~

Classes of Water Service

Full Service Water. Full service water service, formerly known as non-interruptible water service, includes water sold for domestic and municipal uses. Full service treated water rates are the sum of the applicable supply rate, system access rate, water stewardship rate, system power rate and treatment surcharge. Full service untreated water rates are the sum of the applicable supply rate, system access rate, water stewardship rate and system power rate. Full service water sales are the major component of Metropolitan water sales.

Interim Agricultural Water Program. This program provided a discounted rate for agricultural water users that, pursuant to the Act, were permitted to receive only surplus water not needed for domestic or municipal purposes. Metropolitan delivered approximately 40,000 acre-feet of agricultural water under this program in fiscal year 2009-10, approximately 21,000 acre-feet in fiscal year 2010-11 and approximately 29,000 acre-feet in fiscal year 2011-12. On October 14, 2008, the Board approved annual reductions of the Interim Agricultural Water Program discount beginning January 1, 2010 and discontinuance of the program when the discount reached zero on January 1, 2013.

Replenishment. Under the Replenishment Service Program, water was sold at a discounted rate to member agencies, subject to interruption upon notice by Metropolitan. The program allowed Metropolitan to deliver surplus imported water to local groundwater basins and surface storage facilities when supplies were available, with the intent that member agencies could reduce imported water deliveries from Metropolitan during periods of high demand, emergencies or times of shortage. See table entitled “SUMMARY OF WATER RATES” below.

On December 11, 2012, Metropolitan’s Board eliminated the Replenishment Service Program and approved adjustments to increase member agency Tier 1 limits to reflect the historical demand for water used for long-term groundwater and surface storage replenishment. See “—Rate Structure—Tier 1 and Tier 2 Water Supply Rates” above. Water for groundwater replenishment now is priced at applicable full service rates. This adjustment provides additional Tier 1 limits for member agencies that historically purchased water for long-term replenishment purposes and limits their exposure to the higher Tier 2 rates.

Water Rates by Water Category

The following table sets forth Metropolitan’s water rates by category beginning January 1, 2010. See also “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Revenues” in this Appendix A. In addition to the base rates for untreated water sold in the different classes of service, the columns labeled “Treated” include the surcharge that Metropolitan charges for water treated at its water treatment plants. See “—Rate Structure” and “—Classes of Water Service” above for a description of current rates. See “—Litigation Challenging Rate Structure” above for a description of litigation challenging Metropolitan’s water rates.

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**SUMMARY OF WATER RATES
(Dollars per Acre-Foot)**

	<u>SUPPLY RATE</u>		<u>SYSTEM ACCESS RATE</u>	<u>WATER STEWARDSHIP RATE</u>	<u>SYSTEM POWER RATE</u>	<u>TREATMENT SURCHARGE</u>
	<u>Tier 1</u>	<u>Tier 2</u>				
January 1, 2010	\$170 ⁽¹⁾	\$280	\$154	\$41	\$119	\$217
January 1, 2011	\$155 ⁽²⁾	\$280	\$204	\$41	\$127	\$217
January 1, 2012	\$164 ⁽²⁾	\$290	\$217	\$43	\$136	\$234
January 1, 2013	\$140	\$290	\$223	\$41	\$189	\$254
January 1, 2014	\$148	\$290	\$243	\$41	\$161	\$297
January 1, 2015*	\$158	\$290	\$257	\$41	\$126	\$341
January 1, 2016*	\$156	\$290	\$259	\$41	\$138	\$348

	<u>FULL SERVICE TREATED⁽³⁾</u>		<u>FULL SERVICE UNTREATED⁽⁴⁾</u>		<u>INTERIM AGRICULTURAL PROGRAM</u>		<u>REPLENISHMENT RATE</u>	
	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 1</u>	<u>Tier 2</u>	<u>Treated</u>	<u>Untreated</u>	<u>Treated</u>	<u>Untreated</u>
January 1, 2010	\$701	\$811	\$484	\$594	\$615	\$416	\$558	\$366
January 1, 2011	\$744	\$869	\$527	\$652	\$687	\$482	\$601	\$409
January 1, 2012	\$794	\$920	\$560	\$686	\$765	\$537	\$651	\$442
January 1, 2013	\$847	\$997	\$593	\$743	**	**	**	**
January 1, 2014	\$890	\$1,032	\$593	\$735	**	**	**	**
January 1, 2015*	\$923	\$1,055	\$582	\$714	**	**	**	**
January 1, 2016*	\$942	\$1,076	\$594	\$728	**	**	**	**

Source: Metropolitan.

* Rates to be effective January 1, 2015 and January 1, 2016 were adopted by Metropolitan’s Board on April 8, 2014.

** The Interim Agricultural Water Program and Replenishment Service Program were discontinued after 2012.

(1) Includes \$69 per acre-foot Delta Supply Surcharge, which replaced Water Supply Surcharge.

(2) Includes \$51 and \$58 per acre-foot Delta Supply Surcharge for January 1, 2011 and January 1, 2012, respectively.

(3) Full service treated water rates are the sum of the applicable Supply Rate, System Access Rate, Water Stewardship Rate, System Power Rate and Treatment Surcharge.

(4) Full service untreated water rates are the sum of the applicable Supply Rate, System Access Rate, Water Stewardship Rate and System Power Rate.

Additional Revenue Components

Additional charges for the availability of Metropolitan’s water are:

Readiness-to-Serve Charge. This charge is designed to recover at the portion of capital expenditures for infrastructure projects needed to provide standby service, and peak conveyance needs. The Readiness-to-Serve Charge (“RTS”) is allocated to each member agency in proportion to the rolling ten-year share of firm deliveries through Metropolitan’s system. The RTS generated \$133.9 million in fiscal year 2011-12, \$144.0 million in fiscal year 2012-13, and \$154.0 million in 2013-14. Based on the adopted rates

and charges, the RTS is projected to generate \$162 million in fiscal year 2014-15, and \$155.5 million in fiscal year 2015-16.

Water Standby Charges. The Board is authorized to impose water standby or availability of service charges. In May 1993, the Board imposed a water standby charge for fiscal year 1993-94 ranging from \$6.94 to \$15 for each acre or parcel less than an acre within Metropolitan's service area, subject to specified exempt categories. Water standby charges have been imposed at the same rate in each year since 1993-94. Standby charges are assessments under the terms of Proposition 218, a State constitutional ballot initiative approved by the voters on November 5, 1996. See "—California Ballot Initiatives" below.

Member agencies have the option to utilize Metropolitan's existing standby charge authority as a means to collect all or a portion of their RTS charge. Standby charge collections are credited against the member agencies' RTS charges. See "—Readiness-to-Serve Charge" above. Twenty-two member agencies collect their RTS charges through standby charges. For fiscal years 2011-12, 2012-13, and 2013-14, RTS charges collected by means of such standby charges were \$41.7 million, \$41.6 million, and \$41.7 million, respectively.

Capacity Charge. The Capacity Charge is a fixed charge intended to recover the cost of providing peak capacity within the distribution system. It is levied on the maximum summer day demand placed on Metropolitan's system between May 1 and September 30 for the three-calendar-year period ended December 31 two years prior to the date of the capacity charge. Effective January 1, 2014, the Capacity Charge was \$8,600 per cfs. The adopted Capacity Charge ~~will be~~ was \$11,100 per cfs on January 1, 2015, and will be \$10,900 per cfs on January 1, 2016.

Financial Reserve Policy

Metropolitan's reserve policy currently provides for a minimum unrestricted reserve balance at June 30 of each year that is based on probability studies of the wet periods that affect Metropolitan's water sales. The policy establishes a minimum targeted unrestricted reserve level based on an 18-month revenue shortfall estimate and a target level based on an additional two years revenue shortfall estimate. Funds representing the minimum reserve level are held in the Revenue Remainder Fund, and any funds in excess of the minimum reserve level are held in the Water Rate Stabilization Fund. Metropolitan established the Water Rate Stabilization Fund for the principal purpose of maintaining stable and predictable water rates and charges. Funds above the target reserve level may be utilized for pay-as-you-go funding of capital expenditures, for the redemption, defeasance or purchase of outstanding bonds or for any lawful purpose of Metropolitan, as determined by the Board, provided that Metropolitan's fixed charge coverage ratio, which measures the total coverage of all fixed obligations (which includes all revenue bond debt service obligations, State Water Contract capital payments paid from current year operations and subordinate obligations) after payment of operating expenditures, is at or above 1.2. See "CAPITAL INVESTMENT PLAN—Capital Investment Plan Financing" in this Appendix A.

As of June 30, 2014, the minimum reserve requirement was \$202 million. The target reserve level at June 30, 2014 was \$487 million. At June 30, 2014, unrestricted reserves, which consist of the Water Rate Stabilization Fund and the Revenue Remainder Fund, totaled \$487 million on a modified accrual basis, including \$137 million held in Metropolitan's financial reserves pursuant to the exchange contract between Metropolitan and SDCWA due to SDCWA's litigation challenging Metropolitan's rate structure. The amount held due to SDCWA's litigation challenging Metropolitan's rate structure as of ~~September 30, December 31,~~ 2014 was ~~\$148~~159 million. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority" and "METROPOLITAN REVENUES—Litigation Challenging Rate Structure" in this Appendix A. Unrestricted reserves in excess of the target reserve level may be used for any lawful purpose of Metropolitan as directed by the Board, provided that Metropolitan's fixed charge coverage ratio is at or above 1.2.

Consistent with State legislation, Metropolitan will ensure that any funds in excess of target reserve levels that are distributed to member agencies will be distributed in proportion to water sales revenues received from each member agency. In addition, Metropolitan maintains various restricted reserves, including reserves for risk retention, operations and maintenance expenses, State Water Contract payments, and other obligations and purposes.

On April 8, 2014, Metropolitan's Board approved the use of unrestricted reserves, over the target reserve level, as follows: \$100 million deposit to the Replacement and Refurbishment Fund, for pay-as-you-go funding of the CIP; \$100 million deposited to the Other Post-Employment Benefits (OPEB) Trust; and the remaining amount over target, ~~\$252.232~~ million, was placed in a Water Management Fund, ~~\$232 million of which and~~ will cover costs associated with replenishing storage, purchasing transfers and funding drought response programs, ~~and \$20 million for conservation related programs.~~

Wheeling and Exchange Charges

The process for the delivery of water not owned or controlled by Metropolitan is referred to as "wheeling." Under the current rate structure, wheeling parties pay the System Access Rate and Water Stewardship Rate, Treatment Surcharge (if applicable) and power costs for wheeling transactions. See "—Rate Structure" above. These payments are included in Net Operating Revenues. Wheeling and exchange revenues totaled \$89.6 million during fiscal year 2011-12, \$74.6 million in fiscal year 2012-13, and \$81.3 million during fiscal year 2013-14. See "—Litigation Challenging Rate Structure" above for a description of litigation by the SDCWA and IID challenging Metropolitan's System Access Rate and Water Stewardship Rate.

Hydroelectric Power Recovery Revenues

Metropolitan has constructed 16 small hydroelectric plants on its distribution system. The plants are located in Los Angeles, Orange, Riverside and San Diego Counties at existing pressure control structures and other locations. The combined generating capacity of these plants is approximately 131 megawatts. The total capital cost of these 16 facilities is approximately \$176.1 million. Since 2000, annual energy generation sales revenues have ranged between \$14.6 million and nearly \$29.6 million. Energy generation sales revenues were \$24.5 million in fiscal year 2012-13 and \$14.6 million in fiscal year 2013-14.

Principal Customers

All of Metropolitan's regular customers are member agencies. Total water sales to the member agencies accrued for the fiscal year ended June 30, 2014 were 2.04 million acre-feet, generating \$1.48 billion in water sales revenues for such period. Metropolitan's ten largest water customers in the year ended June 30, 2014 are shown in the following table, on an accrual basis. On June 11, 2010, the SDCWA filed litigation challenging Metropolitan's rates. See "—Litigation Challenging Rate Structure" above.

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TEN LARGEST WATER CUSTOMERS
Year Ended June 30, 2014
Accrual Basis (Dollars In Millions)

Agency	Water Sales Revenues⁽¹⁾	Percent of Total	Water Sales in Acre-Feet⁽¹⁾	Percent of Total
San Diego County Water Authority	\$ 328,719,613	22.1%	545,659	26.7%
City of Los Angeles	307,294,389	20.7	441,871	21.6
MWD of Orange County	185,454,744	12.5	231,941	11.3
West Basin MWD	104,897,611	7.1	120,915	5.9
Calleguas MWD	101,576,451	6.8	116,685	5.7
Eastern MWD	80,499,907	5.4	101,622	5.0
Western MWD	60,675,556	4.1	76,194	3.7
Three Valleys MWD	55,639,136	3.7	71,072	3.5
Inland Empire Utilities Agency	40,225,028	2.7	67,833	3.3
Central Basin MWD	29,387,772	2.0	33,951	1.7
Total	\$ 1,294,370,207	87.2%	1,807,743	88.5%
Total Water Sales Revenues	\$ 1,484,616,187	Total Acre-Feet	2,043,720	

Source: Metropolitan.

- (1) Includes wheeling and exchange water sales, revenues and deliveries. See “METROPOLITAN REVENUES—Wheeling and Exchange Charges” in this Appendix A.

Preferential Rights

Section 135 of the Act gives each of Metropolitan’s member agencies a preferential entitlement to purchase a portion of the water served by Metropolitan, based upon a ratio of all payments on tax assessments and otherwise, except purchases of water, made to Metropolitan by the member agency compared to total payments made by all member agencies on tax assessments and otherwise since Metropolitan was formed, except purchases of water. Historically, these rights have not been used in allocating Metropolitan’s water. The California Court of Appeal has upheld Metropolitan’s methodology for calculation of the respective member agencies’ preferential rights under Section 135 of the Act. SDCWA’s litigation challenging Metropolitan’s water rates also challenges Metropolitan’s exclusion of payments for exchange water from the calculation of SDCWA’s preferential right. See “—Litigation Challenging Rate Structure” above.

California Ballot Initiatives

Proposition 218, a State ballot initiative known as the “Right to Vote on Taxes Act,” was approved by the voters on November 5, 1996 adding Articles XIIC and XIID to the California Constitution. Article XIID provides substantive and procedural requirements on the imposition, extension or increase of any “fee” or “charge” levied by a local government upon a parcel of real property or upon a person as an incident of property ownership. As a wholesaler, Metropolitan serves water to its member agencies, not to persons or properties as an incident of property ownership. Thus, water rates charged by Metropolitan to its member agencies are not property related fees and charges and therefore are exempt from the requirements of Article XIID. Fees for water service by Metropolitan’s member agencies or their agencies providing retail water service are subject to the requirements of Article XIID.

Article XIID also imposes certain procedures with respect to assessments. Under Article XIID, “standby charges” are considered “assessments” and must follow the procedures required for “assessments.”

Metropolitan has imposed water standby charges since 1992. Any change to Metropolitan's current standby charges could require notice to property owners and approval by a majority of such owners returning mail-in ballots approving or rejecting any imposition or increase of such standby charge. Twenty-two member agencies have elected to collect all or a portion of their readiness-to-serve charges through standby charges. See "*—Additional Revenue Components—Readiness-to-Serve Charge*" and "*—Water Standby Charges*" above. Even if Article XIID is construed to limit the ability of Metropolitan and its member agencies to impose or collect standby charges, the member agencies will continue to be obligated to pay the readiness-to-serve charges.

Article XIIC extends the people's initiative power to reduce or repeal previously authorized local taxes, assessments fees and charges. This extension of the initiative power is not limited by the terms of Article XIIC to fees imposed after November 6, 1996 or to property-related fees and charges and absent other authority could result in retroactive reduction in existing taxes, assessments or fees and charges.

Proposition 26, a State ballot initiative aimed at restricting regulatory fees and charges, was approved by the California voters on November 2, 2010. Proposition 26 broadens the definition of "tax" in Article XIIC of the California Constitution to include levies, charges and exactions imposed by local governments, except for charges imposed for benefits or privileges or for services or products granted to the payor (and not provided to those not charged) that do not exceed their reasonable cost; regulatory fees that do not exceed the cost of regulation; fees for the use of local governmental property; fines and penalties imposed for violations of law; real property development fees; and assessments and property-related fees imposed under Article XIID of the California Constitution. Taxes imposed by a special district such as Metropolitan are subject to approval by two-thirds of the voters voting on the ballot measure for authorization. Proposition 26 applies to charges imposed or increased by local governments after the date of its approval. Metropolitan believes its water rates and charges are not taxes under Proposition 26. Nevertheless, Metropolitan is assessing whether Proposition 26 may affect future water rates and charges. SDCWA's lawsuit challenging the rates adopted by Metropolitan in April 2012, part of which became effective January 1, 2013 and part of which became effective January 1, 2014, alleged that such rates violate Proposition 26. (See "*—Litigation Challenging Rate Structure*" above.)

Propositions 218 and 26 were adopted as measures that qualified for the ballot pursuant to the State's initiative process. From time to time, other initiative measures could be adopted or legislative measures could be approved by the Legislature, which may place limitations on the ability of Metropolitan or its member agencies to increase revenues or to increase appropriations. Such measures may further affect Metropolitan's ability to collect taxes, assessments or fees and charges, which could have an effect on Metropolitan's revenues.

Investment of Moneys in Funds and Accounts

All moneys in any of the funds and accounts established pursuant to Metropolitan's water revenue or general obligation bond resolutions are invested by the Treasurer in accordance with Metropolitan's Statement of Investment Policy. All Metropolitan funds available for investment are currently invested in United States Treasury and agency securities, commercial paper, negotiable certificates of deposit, banker's acceptances, corporate notes, municipal bonds, asset-backed, mortgage-backed securities and the California Local Agency Investment Fund ("LAIF"). The LAIF is a voluntary program created by statute as an investment alternative for California's local governments and special districts. LAIF permits such local agencies to participate in an investment portfolio, which invests billions of dollars, using the investment expertise of the State Treasurer's Office.

The Statement of Investment Policy provides that in managing Metropolitan's investments, the primary objective shall be to safeguard the principal of the invested funds. The secondary objective shall be to meet all liquidity requirements and the third objective shall be to achieve a return on the invested funds.

Although the Statement of Investment Policy permits investments in some asset-backed securities, the portfolio does not include any of the special investment vehicles related to sub-prime mortgages. The Statement of Investment Policy allows Metropolitan to exceed the portfolio and single issuer limits for purchases of California local agency securities when purchasing Metropolitan tendered bonds in conjunction with its self-liquidity program. See “METROPOLITAN EXPENDITURES—Variable Rate and Swap Obligations” in this Appendix A. Metropolitan’s current investments comply with the Statement of Investment Policy.

As of ~~September 30,~~December 31, 2014, the total market value (cash-basis) of all Metropolitan funds was \$~~1.371.58~~ billion, including bond reserves of \$~~83.884.5~~ million. The market value of Metropolitan’s investment portfolio is subject to market fluctuation and volatility and general economic conditions. In fiscal year 2013-14, Metropolitan’s earnings on investments, including adjustments for gains and losses and premiums and discounts, including construction account and trust fund earnings, on a cash basis (unaudited) were \$15.7 million. In fiscal year 2012-13, Metropolitan’s earnings on investments, on a cash basis (unaudited) were \$9.4 million. In fiscal year 2011-12, Metropolitan’s earnings on investments, on a cash basis (unaudited) were \$13.9 million. Over the three years ended ~~September 30,~~December 31, 2014, the market value of the month-end balance of Metropolitan’s investment portfolio (excluding bond reserve funds) averaged approximately \$1.1 billion. The minimum month-end balance of Metropolitan’s investment portfolio (excluding bond reserve funds) during such period was approximately \$829.5 million on July 31, 2012. See Footnote 3 to Metropolitan’s audited financial statements in Appendix B for additional information on the investment portfolio.

Metropolitan’s regulations require that (1) the Treasurer provide an annual Statement of Investment Policy for approval by Metropolitan’s Board, (2) the Treasurer provide a monthly investment report to the Board and the General Manager showing by fund the description, maturity date, yield, par, cost and current market value of each security, and (3) the General Counsel review as to eligibility the securities invested in by the Treasurer for that month and report his or her determinations to the Board. The Board approved the Statement of Investment Policy for fiscal year 2014-15 on June 10, 2014.

Subject to the provisions of Metropolitan’s water revenue or general obligation bond resolutions, obligations purchased by the investment of bond proceeds in the various funds and accounts established pursuant to a bond resolution are deemed at all times to be a part of such funds and accounts and any income realized from investment of amounts on deposit in any fund or account therein will be credited to such fund or account. The Treasurer is required to sell or present for redemption any investments whenever it may be necessary to do so in order to provide moneys to meet required payments or transfers from such funds and accounts. For the purpose of determining at any given time the balance in any such funds, any such investments constituting a part of such funds and accounts will be valued at the then estimated or appraised market value of such investments.

All investments, including those authorized by law from time to time for investments by public agencies, contain certain risks. Such risks include, but are not limited to, a lower rate of return than expected and loss or delayed receipt of principal. The occurrence of these events with respect to amounts held under Metropolitan’s water revenue or general obligation revenue bond resolutions, or other amounts held by Metropolitan, could have a material adverse effect on Metropolitan’s finances. These risks may be mitigated, but are not eliminated, by limitations imposed on the portfolio management process by Metropolitan’s Statement of Investment Policy.

The Statement of Investment Policy requires that investments have a minimum credit rating of “A1/P1/F1” for short-term securities and “A” for longer-term securities at the time of purchase. If immediate liquidation of a security downgraded below these levels is not in the best interests of Metropolitan, the Treasurer or investment manager, in consultation with an ad hoc committee made up of the Chairman of the Board, the Chairman of the Finance and Insurance Committee and the General Manager, and with the

concurrence of the General Counsel, may dispose of the security in an orderly and prudent manner considering the circumstances, under terms and conditions approved by a majority of the members of such ad hoc committee. The Treasurer is required to include a description of any securities that have been downgraded below investment grade and the status of their disposition in the Treasurer's monthly report.

The Statement of Investment Policy also limits the amount of securities that can be purchased by category, as well as by issuer, and prohibits investments that can result in zero interest income. Metropolitan's securities are settled on a delivery versus payment basis and are held by an independent third-party custodian. See Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR ~~FISCAL YEARS~~THE SIX MONTHS ENDED ~~JUNE 30, DECEMBER 31,~~ 2014 ~~AND JUNE 30,~~and 2013 (UNAUDITED)" for a description of Metropolitan's investments at June 30, 2014.

Metropolitan retains two outside investment firms to manage the long-term portion of Metropolitan's portfolio. The outside managers are required to adhere to Metropolitan's Statement of Investment Policy. As of ~~September 30, December 31,~~ 2014, such managers were managing approximately ~~\$331.2333.8~~ million in investments on behalf of Metropolitan. Metropolitan's Statement of Investment Policy may be changed at any time by the Board (subject to State law provisions relating to authorized investments). There can be no assurance that the State law and/or the Statement of Investment Policy will not be amended in the future to allow for investments that are currently not permitted under State law or the Statement of Investment Policy, or that the objectives of Metropolitan with respect to investments or its investment holdings at any point in time will not change.

METROPOLITAN EXPENDITURES

General

The following table sets forth a summary of Metropolitan's expenditures, by major function, for the five years ended June 30, 2014. The table provides cash basis information, which is unaudited. Expenses of Metropolitan for the fiscal years ended June 30, 2014 and June 30, 2013, on an accrual basis, are shown in Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR ~~FISCAL YEARS~~THE SIX MONTHS ENDED ~~JUNE 30, DECEMBER 31,~~ 2014 ~~AND JUNE 30, 2013,~~and 2013 (UNAUDITED)."

SUMMARY OF EXPENDITURES Fiscal Years Ended June 30 (Dollars in Millions)

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Operation and Maintenance Costs ⁽¹⁾	\$ 441.6	\$ 430.8	\$ 425.3	\$ 413.6	\$ 561.3
Total State Water Project and Water Transfers ⁽²⁾	560.1	593.4	535.4	531.1	472.5
Total Debt Service	287.0	306.7	323.0	326.9	372.0
Construction Disbursements from Revenues ⁽³⁾	35.1	45.0	44.2	54.7	89.3
Other ⁽⁴⁾	<u>5.3</u>	<u>2.4</u>	<u>2.8</u>	<u>6.2</u>	<u>6.3</u>
Total Disbursements (net of reimbursements) ⁽⁵⁾	<u>\$1,329.1</u>	<u>\$1,378.3</u>	<u>\$1,330.7</u>	<u>\$1,332.5</u>	<u>\$1,501.4</u>

Source: Metropolitan.

- (1) Includes inventories, undistributed payroll, local resource programs, conservation programs and Colorado River Aqueduct power. See the table headed "Summary of Receipts by Source" under "METROPOLITAN REVENUES" in this Appendix A.
- (2) Includes both operating and capital expense portions. See "METROPOLITAN'S WATER SUPPLY—Water Transfer, Storage and Exchange Programs" and "POWER SOURCES AND COSTS" in this Appendix A.

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- (3) At the discretion of the Board, in any given year, Metropolitan may increase or decrease funding available for construction disbursements to be paid from revenues. Does not include expenditures of bond proceeds.
- (4) Includes operating equipment and arbitrage rebate.
- (5) Disbursements exceeded revenues in the fiscal years ended June 30, 2010 and 2011. See “METROPOLITAN REVENUES—Financial Reserve Policy” in this Appendix A.

Revenue Bond Indebtedness

Metropolitan has issued the following water revenue bonds, which as of ~~November~~February 1, ~~2014~~2015, were outstanding in the amounts set forth below:

<u>Name of Issue</u>	<u>Original Amount Issued</u>	<u>Principal Outstanding</u>
Water Revenue Bonds, Issue of 1991	\$ 300,000,000	\$ -0-
Water Revenue Bonds, Issue of 1992	550,000,000	-0-
Water Revenue Refunding Bonds, 1993 Series A	168,759,889	101,840,000
Water Revenue Refunding Bonds, 1993 Series B	89,595,000	-0-
Water Revenue Bonds, 1995 Series A	175,000,000	-0-
Water Revenue Refunding Bonds, 1996 Series A	108,375,000	-0-
Water Revenue Refunding Bonds, 1996 Series B	258,875,000	-0-
Water Revenue Bonds, 1996 Series C	377,500,000	-0-
Water Revenue Bonds, 1997 Authorization, Series A	650,000,000	-0-
Water Revenue Bonds, 1997 Authorization, Series B and Series C	100,000,000	-0-
Water Revenue Refunding Bonds, 1998 Series A	148,705,000	-0-
Water Revenue Bonds, 1999 Authorization, Series A	100,000,000	-0-
Water Revenue Bonds, 1999 Authorization, Series B and Series C	100,000,000	-0-
Water Revenue Bonds, 2000 Authorization, Series B-1	88,800,000	-0-
Water Revenue Bonds, 2000 Authorization, Series B-2	88,800,000	-0-
Water Revenue Bonds, 2000 Authorization, Series B-3 and B-4 ⁽¹⁾	177,600,000	177,600,000
Water Revenue Refunding Bonds, 2001 Series A	195,670,000	-0-
Water Revenue Refunding Bonds, 2001 Series B1 and B-2	224,800,000	-0-
Water Revenue Bonds, 2001 Series C-1 and C-2	200,000,000	-0-
Water Revenue Refunding Bonds, 2002 Series A	96,640,000	-0-
Water Revenue Refunding Bonds, 2002 Series B	35,600,000	-0-
Water Revenue Refunding Bonds, 2003 Series A	36,215,000	-0-
Water Revenue Bonds, 2003 Authorization, Series B-1	105,580,000	-0-
Water Revenue Bonds, 2003 Authorization, Series B-2	94,420,000	-0-
Water Revenue Refunding Bonds, 2003 Series C-1, C-2 and C-3	338,230,000	-0-
Water Revenue Refunding Bonds, 2004 Series A-1 and A-2	162,455,000	-0-
Water Revenue Refunding Bonds, 2004 Series B	274,415,000	-0-
Water Revenue Bonds, 2003 Authorization, Series B-3	262,295,000	-0-
Water Revenue Bonds, 2003 Authorization, Series B-4	37,705,000	-0-
Water Revenue Refunding Bonds, 2004 Series C	136,090,000	-0-
Water Revenue Bonds, 2005 Authorization, Series A	100,000,000	75,620,000
Water Revenue Bonds, 2005 Authorization, Series B-1 and B-2	100,000,000	-0-
Water Revenue Refunding Bonds, 2006 Series A-1 and A-2	74,140,000	-0-
Water Revenue Bonds, 2005 Authorization, Series C	200,000,000	175,000,000
Water Revenue Bonds, 2005 Authorization, Series D-1 and D-2	100,000,000	-0-
Water Revenue Refunding Bonds, 2006 Series B	45,875,000	24,055,000
Water Revenue Bonds, 2006 Authorization, Series A	400,000,000	391,355,000
Water Revenue Bonds, 2006 Authorization, Series B	100,000,000	-0-
Water Revenue Refunding Bonds, 2007 Series A-1 and A-2	218,425,000	-0-
Water Revenue Refunding Bonds, 2007 Series B	81,900,000	-0-
Water Revenue Refunding Bonds, 2008 Series A-1	250,940,000	-0-
Water Revenue Refunding Bonds, 2008 Series A-2 ⁽¹⁾	250,635,000	62,465,000
Water Revenue Refunding Bonds, 2008 Series B	133,430,000	127,200,000
Water Revenue Refunding Bonds, 2008 Series C	79,045,000	41,800,000
Water Revenue Bonds, 2008 Authorization, Series A	200,000,000	187,830,000 183,525,000
Water Revenue Refunding Bonds, 2009 Series A-1	104,185,000	-0-
Water Revenue Refunding Bonds, 2009 Series A-2 ⁽¹⁾	104,180,000	104,180,000
Water Revenue Refunding Bonds, 2009 Series B	106,690,000	106,690,000
Water Revenue Refunding Bonds, 2009 Series C	91,165,000	91,165,000
Water Revenue Bonds, 2008 Authorization, Series B	21,615,000	15,035,000
Water Revenue Bonds, 2008 Authorization, Series C ⁽²⁾	78,385,000	78,385,000
Water Revenue Bonds, 2008 Authorization, Series D ⁽²⁾	250,000,000	250,000,000
Water Revenue Refunding Bonds, 2009 Series D	81,065,000	64,740,000
Water Revenue Refunding Bonds, 2009 Series E	26,050,000	18,355,000
Water Revenue Refunding Bonds, Special Variable Rate, 2010 Series A	128,005,000	0

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Name of Issue	Original Amount Issued	Principal Outstanding
Water Revenue Refunding Bonds, 2010 Series B (Continued on next page) (Continued from previous page)	88,845,000	84,175,000
<i>(Continued from previous page)</i>		
Water Revenue Refunding Bonds, Special Variable Rate, 2010 Series A	\$ 128,005,000	\$ -0-
Water Revenue Bonds, 2010 Authorization, Series A ⁽²⁾	\$ 250,000,000	\$ 250,000,000
Water Revenue Refunding Bonds, 2011 Series A1-A4 ⁽¹⁾	228,875,000	228,875,000
Water Revenue Refunding Bonds, 2011 Series B	167,885,000	73,230,000
Water Revenue Refunding Bonds, 2011 Series C	157,100,000	156,100,000
Water Revenue Refunding Bonds, 2012 Series A	181,180,000	181,180,000
Water Revenue Refunding Bonds, 2012 Series B-1 and B-2 ⁽¹⁾	98,585,000	98,585,000
Water Revenue Refunding Bonds, 2012 Series C	190,600,000	190,600,000
Water Revenue Refunding Bonds, 2012 Series D	39,520,000	19,605,000
Water Revenue Refunding Bonds, 2012 Series E1	28,420,000	-0-
Water Revenue Refunding Bonds, 2012 Series E2	29,820,000	29,820,000
Water Revenue Refunding Bonds, 2012 Series E3	31,220,000	31,220,000
Water Revenue Refunding Bonds, 2012 Series F	60,035,000	60,035,000
Water Revenue Refunding Bonds, 2012 Series G	111,890,000	111,890,000
Special Variable Rate Water Revenue Refunding Bonds, 2013 Series D ⁽¹⁾	87,445,000	87,445,000
Special Variable Rate Water Revenue Refunding Bonds, 2013 Series E ⁽¹⁾	104,820,000	104,820,000
Water Revenue Refunding Bonds, 2014 Series A	95,935,000	95,935,000
Water Revenue Refunding Bonds, 2014 Series B	10,575,000	10,575,000
Water Revenue Refunding Bonds, 2014 Series C1-C3	30,335,000	30,335,000
Special Variable Rate Water Revenue Refunding Bonds, 2014 Series D ⁽¹⁾	79,770,000	79,770,000
Water Revenue Refunding Bonds, 2014 Series E	86,060,000	86,060,000
Water Revenue Refunding Bonds, 2014 Series F	7,860,000	7,860,000
Water Revenue Refunding Bonds, 2014 Series G1-G5	57,840,000	57,840,000
Total	\$11,232,469,889 <u>1,224,609,889</u>	\$4,169,270,004 <u>157,105,000</u>

Source: Metropolitan.

- (1) Outstanding variable rate obligation.
- (2) Designated as "Build America Bonds" pursuant to the American Recovery and Reinvestment Act of 2009.

Limitations on Additional Revenue Bonds

Resolution 8329, adopted by Metropolitan's Board on July 9, 1991, as amended and supplemented (collectively with all such supplemental resolutions, the "Revenue Bond Resolutions"), provides for the issuance of Metropolitan's water revenue bonds. The Revenue Bond Resolutions establish limitations on the issuance of additional obligations payable from Net Operating Revenues. Under the Revenue Bond Resolutions, no additional bonds, notes or other evidences of indebtedness payable out of Operating Revenues may be issued having any priority in payment of principal, redemption premium, if any, or interest over any water revenue bonds authorized by the Revenue Bond Resolutions ("Parity Bonds") or other obligations of Metropolitan having a lien and charge upon, or being payable from, the Net Operating Revenues on parity with such water revenue bonds ("Parity Obligations"). No additional Parity Bonds or Parity Obligations may be issued or incurred unless the conditions of the Revenue Bond Resolutions have been satisfied.

The laws governing Metropolitan's ability to issue water revenue bonds currently provide two additional limitations on indebtedness that may be incurred by Metropolitan. The Act provides for a limit on

general obligation bonds, water revenue bonds and other evidences of indebtedness at 15 percent of the assessed value of all taxable property within Metropolitan’s service area. As of ~~November~~February 1, ~~2014,2015~~, outstanding general obligation bonds, water revenue bonds and other evidences of indebtedness in the amount of \$~~4.314.30~~ billion represented approximately 0.19 percent of the fiscal year 2014-15 taxable assessed valuation of \$2,315 billion. The second limitation under the Act specifies that no revenue bonds may be issued, except for the purpose of refunding, unless the amount of net assets of Metropolitan as shown on its balance sheet as of the end of the last fiscal year prior to the issuance of such bonds, equals at least 100 percent of the aggregate amount of revenue bonds outstanding following the issuance of such bonds. The net assets of Metropolitan at June 30, 2014 were \$7.20 billion. The aggregate amount of revenue bonds outstanding as of ~~November~~February 1, ~~2014~~2015 was \$~~4.174.16~~ billion. The limitation does not apply to other forms of financing available to Metropolitan. Audited financial statements including the net assets of Metropolitan as of June 30, 2014 and June 30, 2013, respectively, are shown in Appendix B – “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR ~~FISCAL YEAR~~THE SIX MONTHS ENDED ~~JUNE 30,DECEMBER 31,~~ 2014 ~~AND JUNE 30, 2013, and~~ 2013 (UNAUDITED).”

Metropolitan provides no assurance that the Act’s limitations on indebtedness will not be revised or removed by future legislation. Limitations under the Revenue Bond Resolutions respecting the issuance of additional obligations payable from Net Operating Revenues on a parity with water revenue bonds of Metropolitan will remain in effect so long as any water revenue bonds authorized pursuant to the Revenue Bond Resolutions are outstanding, provided however, that the Revenue Bond Resolutions are subject to amendment and supplement in accordance with their terms.

Variable Rate and Swap Obligations

As of ~~November~~February 1, 2014, Metropolitan had outstanding \$943.7 million of variable rate obligations, including bonds bearing interest in the Index Mode or Flexible Index Mode (the “Index Tender Bonds”), special variable rate bonds initially designated as self-liquidity bonds (the “Self-Liquidity Bonds”), and variable rate demand obligations supported by standby bond purchase agreements between Metropolitan and various liquidity providers (“Liquidity Supported Bonds”).

Index Tender Bonds. The Index Tender Bonds have substantially similar terms and conditions; however, the unscheduled mandatory tender dates and related tender periods for the Index Tender Bonds may differ. The Index Tender Bonds bear interest at a rate that fluctuates weekly based on the SIFMA Municipal Swap Index published weekly by Municipal Market Data. The Index Tender Bonds outstanding as of ~~November~~February 1, ~~2014,2015~~, are summarized in the following table:

Series	Date of Issuance	Original Principal Amount Issued	Next Scheduled Mandatory Tender Date	Maturity Date
2009 A-2	May 20, 2009	\$104,180,000	February 9, 2015 <u>January 11, 2016</u>	July 1, 2030
2011 A-1	June 2, 2011	64,440,000	January 16, 2015 <u>2016</u>	July 1, 2036
2011 A-2	June 2, 2011	50,000,000	May 1, 2015	July 1, 2036
2011 A-3	June 2, 2011	64,435,000	January 16, 2015 <u>2016</u>	July 1, 2036
2011 A-4	June 2, 2011	50,000,000	May 1, 2015	July 1, 2036
2012 B-1	April 27, 2012	49,295,000	May 1, 2015	July 1, 2027
2012 B-2	April 27, 2012	49,290,000	May 1, 2015	July 1, 2027

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2013 E ⁽¹⁾	July 2, 2013	104,820,000	June 5, 2015	July 1, 2030
Total		\$536,460,000		

Source: Metropolitan.

- (1) Flexible Index Mode Bonds. The terms and conditions of Flexible Index Mode Bonds are substantially similar to Index Mode Bonds except that each tender period may not exceed 270 days.

The Index Tender Bonds are subject to mandatory tender under certain circumstances. Metropolitan anticipates that it will pay the purchase price of tendered Index Tender Bonds from the proceeds of remarketing such Index Tender Bonds or from other available funds. Metropolitan's obligation to pay the purchase price of such Index Tender Bonds is an unsecured obligation of Metropolitan that it would pay from Net Operating Revenues only after it has made payments and deposits with respect to its Operating Revenues, the Parity Bonds, Parity Obligations and other obligations secured by Net Operating Revenues. Metropolitan has not secured any liquidity facility or letter of credit to support the payment of the purchase price of Index Tender Bonds in connection with a scheduled mandatory tender. If the purchase price of the Index Tender Bonds of any Series is not paid from the proceeds of remarketing or other funds following a scheduled mandatory tender, such Index Tender Bonds then will bear interest at a default rate of up to 12 percent per annum until purchased by Metropolitan or redeemed. Failure to pay the purchase price of a series of Index Tender Bonds on a scheduled mandatory tender date is a default under the related paying agent agreement, upon the occurrence and continuance of which a majority in aggregate principal amount of the owners of such series of Index Tender Bonds may elect a bondholders' committee to exercise rights and powers of such owners under such paying agent agreement. Failure to pay the purchase price of a series of Index Tender Bonds on a scheduled mandatory tender date is not a default under the Master Resolution. If the purchase price of the Index Tender Bonds of any series is not paid on a scheduled mandatory tender date, such Index Tender Bonds will also be subject to special mandatory redemption, in part, 18, 36 and 54 months following the purchase default. Any such special mandatory redemption payment will constitute a Bond Obligation payable on parity with the Parity Bonds and the Parity Obligations.

Self-Liquidity Bonds. As of ~~November~~February 1, ~~2014,2015~~, Metropolitan had \$167.2 million of outstanding self-liquidity bonds, comprised of \$87.4 million Special Variable Rate Water Revenue Refunding Bonds, 2013 Series D, and \$79.8 million Special Variable Rate Water Revenue Refunding Bonds, 2014 Series D. The Self-Liquidity Bonds are subject to optional tender upon seven days' notice by the owners thereof and mandatory tender upon specified events. Metropolitan is irrevocably committed to purchase all Self-Liquidity Bonds tendered pursuant to any optional or mandatory tender to the extent that remarketing proceeds are insufficient therefor and no standby bond purchase agreement or other liquidity facility is in effect. Metropolitan's obligation to pay the purchase price of any tendered Self-Liquidity Bonds is an unsecured, special limited obligation of Metropolitan payable from Net Operating Revenues. In addition, Metropolitan's investment policy permits it to purchase tendered Self-Liquidity Bonds as an investment for its investment portfolio (other than amounts in its investment portfolio consisting of bond reserve funds). Thus, while Metropolitan is only obligated to purchase tendered Self-Liquidity Bonds from Net Operating Revenues, it may use the cash and investments in its investment portfolio (other than amounts in its investment portfolio consisting of bond reserve funds and amounts posted as collateral with interest rate swap counterparties as described below) to purchase tendered Self-Liquidity Bonds. Metropolitan has not secured any liquidity facility or letter of credit to pay the purchase price of any tendered Self-Liquidity Bonds; however, Metropolitan has entered into a Revolving Credit Agreement (as described below) pursuant to which it may make borrowings for the purpose of paying the purchase price of Self-Liquidity Bonds. See "—Revolving Credit Agreement" below. Failure to pay the purchase price of Self-Liquidity Bonds upon optional or mandatory tender is not a default under the related paying agent agreement or a default under the Master Resolution.

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Liquidity Supported Bonds. The interest rates for Metropolitan’s other variable rate demand obligations, totaling \$240.1 million as of ~~November~~February 1, ~~2014,2015~~, are reset on a daily or weekly basis. Such variable rate demand obligations are supported by Standby Bond Purchase Agreements between Metropolitan and various liquidity providers that provide for purchase of variable rate bonds by the applicable liquidity provider upon tender of such variable rate bonds and a failed remarketing. A decline in the creditworthiness of a liquidity provider will likely result in an increase in the interest rate of the applicable variable rate bonds, as well as an increase in the risk of a failed remarketing of such tendered variable rate bonds. Variable rate bonds purchased by a liquidity provider bear interest at a significantly higher interest rate and Metropolitan’s obligation to reimburse the liquidity provider may convert the term of the variable rate bonds purchased by the liquidity provider into a term loan amortizable over a period of up to three years, depending on the applicable liquidity facility.

The following table lists the liquidity providers, the expiration date of each facility and the principal amount of outstanding variable rate demand obligations covered under each facility as of ~~November~~February 1, ~~2014,2015~~.

<u>Liquidity Provider</u>	<u>Bond Issue</u>	<u>Principal Outstanding</u>	<u>Facility Expiration</u>
Wells Fargo Bank, N.A.	2000 Authorization Series B-3	\$ 88,800,000	February 2017
	2000 Authorization Series B-4	<u>88,800,000</u>	February 2017
	Total	\$177,600,000	
Barclays Bank PLC	2008 Series A-2	<u>\$62,465,000</u>	September 2016
Total		\$240,065,000	

Source: Metropolitan.

Variable Rate Exposure Policy. Included in Metropolitan’s \$943.7 million of variable rate obligations are \$493.6 million of variable rate demand obligations which, by virtue of interest rate swap agreements, are treated by Metropolitan as fixed rate debt for the purpose of calculating debt service requirements, ~~although~~ the variable payments that Metropolitan receives from swap counterparties ~~do not usually equal~~approximate the payments that Metropolitan makes on associated variable rate debt. The remaining \$450 million of variable rate obligations represent approximately 10.8 percent of total outstanding water revenue bonds, as of ~~November~~February 1, ~~2014,2015~~.

Metropolitan’s variable rate exposure policy requires that variable rate debt be managed to limit net interest cost increases within a fiscal year as a result of interest rate changes to no more than \$5 million. In addition, the maximum amount of variable interest rate exposure (excluding variable rate bonds associated with interest rate swap agreements) is limited to 40 percent of total outstanding water revenue bond debt. Variable rate debt capacity will be reevaluated as interest rates change and managed within these parameters.

Interest Rate Swap Transactions. By resolution adopted on September 11, 2001, Metropolitan’s Board authorized the execution of interest rate swap transactions and related agreements in accordance with a master swap policy, which was subsequently amended by resolutions adopted on July 14, 2009 and May 11, 2010. Metropolitan may execute interest rate swaps if the transaction can be expected to reduce exposure to changes in interest rates on a particular financial transaction or in the management of interest rate risk derived from Metropolitan’s overall asset/liability balance, result in a lower net cost of borrowing or achieve a higher net rate of return on investments made in connection with or incidental to the issuance, incurring or carrying of Metropolitan’s obligations or investments, or manage variable interest rate exposure consistent with prudent debt practices and Board-approved guidelines. The Chief Financial Officer reports to the Finance and Insurance Committee of Metropolitan’s Board each quarter on outstanding swap transactions, including notional amounts outstanding, counterparty exposures and termination values based on then-existing market conditions.

Metropolitan currently has one type of interest rate swap, referred to in the table below as “Fixed Payor Swaps.” Under this type of swap, Metropolitan receives payments that are calculated by reference to a floating interest rate and makes payments that are calculated by reference to a fixed interest rate.

Net payments under the terms of the interest rate swap agreements are payable on a parity with the Parity Obligations. Termination payments under the 2002 A and 2002 B interest rate swap agreements would be payable on a parity with the Parity Obligations. All other termination payments related to interest rate swap agreements would be subordinate to the Parity Obligations.

The following swap transactions were outstanding as of ~~November~~February 1, ~~2014~~2015:

FIXED PAYOR SWAPS:

<u>Designation</u>	<u>Notional Amount Outstanding</u>	<u>Swap Counterparty</u>	<u>Fixed Payor Rate</u>	<u>MWD Receives</u>	<u>Maturity Date</u>
2002 A	\$75,838,400	Morgan Stanley Capital Services, Inc.	3.300	57.74% of one-month LIBOR	7/1/2025
2002 B	28,371,600	JPMorgan Chase Bank	3.300	57.74% of one-month LIBOR	7/1/2025
2003 ⁽¹⁾	158,597,500	Deutsche Bank AG	3.257	61.20% of one-month LIBOR	7/1/2030
2003	158,597,500	JPMorgan Chase Bank	3.257	61.20% of one-month LIBOR	7/1/2030
2004 C	7,760,500	Morgan Stanley Capital Services, Inc.	2.980	61.55% of one-month LIBOR	10/1/2029
2004 C	6,349,500	Citigroup Financial Products, Inc.	2.980	61.55% of one-month LIBOR	10/1/2029
2005	29,057,500	JPMorgan Chase Bank	3.360	70% of 3-month LIBOR	7/1/2030
2005	<u>29,057,500</u>	Citigroup Financial Products, Inc.	3.360	70% of 3-month LIBOR	7/1/2030
Total	\$493,630,000				

Source: Metropolitan.

Draft Dated 2/26/15

- (1) The obligations under this interest rate swap agreement were assigned by UBS AG to Deutsche Bank AG, New York Branch, pursuant to novation transactions dated July 22, 2010.

These interest rate swap agreements entail risk to Metropolitan. The counterparty may fail or be unable to perform, interest rates may vary from assumptions, Metropolitan may be required to post collateral in favor of its counterparties and Metropolitan may be required to make significant payments in the event of an early termination of an interest rate swap. Metropolitan believes that if such an event were to occur, it would not have a material adverse impact on its financial position. Metropolitan seeks to manage counterparty risk by diversifying its swap counterparties, limiting exposure to any one counterparty, requiring collateralization or other credit enhancement to secure swap payment obligations, and by requiring minimum credit rating levels. Initially swap counterparties must be rated at least “Aa3” or “AA-”, or equivalent by any two of the nationally recognized credit rating agencies; or use a “AAA” subsidiary as rated by at least one nationally recognized credit rating agency. Should the credit rating of an existing swap counterparty drop below the required levels, Metropolitan may enter into additional swaps if those swaps are “offsetting” and risk-reducing swaps. Each counterparty is initially required to have minimum capitalization of at least \$150 million. See Note 5(f) in Appendix B - “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR ~~FISCAL YEARS~~ THE SIX MONTHS ENDED JUNE 30, DECEMBER 31, 2014 AND JUNE 30, 2013 and 2013 (UNAUDITED).”

Early termination of an interest rate swap agreement could occur due to a default by either party or the occurrence of a termination event. As of ~~September 30, December 31,~~ 2014, Metropolitan would have been required to pay to its counterparties termination payments if some of its swaps were terminated on that date and would have been entitled to receive termination payments from its counterparties if other swaps were terminated. Metropolitan’s net exposure to its counterparties for all such termination payments on that date was approximately \$7990 million. Metropolitan does not presently anticipate early termination of any of its interest rate swap agreements due to default by either party or the occurrence of a termination event. However, effective June 28, 2012, Metropolitan exercised optional early termination provisions to terminate all or a portion of certain interest rate swap agreements totaling a notional amount of \$322 million. Effective February 12, 2014, Metropolitan exercised optional early termination provisions to terminate a portion of certain interest rate swap agreements, totaling a notional amount of \$147 million. Effective July 29, 2014, Metropolitan optionally terminated portions of certain interest rate swap agreements totaling a notional amount of \$163 million.

Metropolitan is required to post collateral in favor of a counterparty to the extent that Metropolitan’s total exposure for termination payments to that counterparty exceeds the threshold specified in the applicable swap agreement. Conversely, the counterparties are required to release collateral to Metropolitan or post collateral for the benefit of Metropolitan as market conditions become favorable to Metropolitan. As of ~~September 30, December 31,~~ 2014, Metropolitan had no collateral posted with any counterparty. The highest, month-end, amount of collateral posted was \$36.8 million, on June 30, 2012, which was based on an outstanding swap notional amount of \$1.4 billion. The amount of required collateral varies from time to time due primarily to interest rate movements and can change significantly over a short period of time. See “METROPOLITAN REVENUES—Financial Reserve Policy” in this Appendix A. In the future, Metropolitan may be required to post additional collateral, or may be entitled to a reduction or return of the required collateral amount. Collateral deposited by Metropolitan is held by the counterparties; a bankruptcy of any counterparty holding collateral posted by Metropolitan could adversely affect the return of the collateral to Metropolitan. Moreover, posting collateral limits Metropolitan’s liquidity. If collateral requirements increase significantly, Metropolitan’s liquidity may be materially adversely affected. See “METROPOLITAN REVENUES—Financial Reserve Policy.”

Build America Bonds

Metropolitan previously issued and designated three series of Bonds in the aggregate principal amount of \$578,385,000 as “Build America Bonds” under the provisions of the American Recovery and Reinvestment Act of 2009 (the “Build America Bonds”). Except as they may be reduced by sequestration as described in the following paragraph, Metropolitan currently expects to receive cash subsidies from the United States Treasury equal to 35 percent of the interest payable on all such outstanding Build America Bonds (the “Interest Subsidy Payments”). The Interest Subsidy Payments in connection with the Build America Bonds do not constitute Operating Revenues under the Master Resolution. Such Interest Subsidy Payments will constitute Additional Revenues, which Metropolitan may take into consideration when establishing its rates and charges and will be available to Metropolitan to pay principal of and interest on Metropolitan’s Bonds.

The Budget Control Act of 2011 (the “Budget Control Act”) provided for increases in the federal debt limit and established procedures designed to reduce the federal budget deficit. The Budget Control Act provided that a failure to reduce the deficit would result in sequestration: automatic, generally across-the-board, spending reductions. These reductions began on March 1, 2013 pursuant to an executive order that reduced budgetary authority for expenditures subject to sequestration, including subsidies for Build America Bonds. Pursuant to this executive order, the approximately \$6.64 million interest subsidy payment that Metropolitan received on July 1, 2013 was reduced by 8.7 percent, or \$578,000, to \$6.06 million. Refund payments processed on or after October 1, 2014 and on or before September 30, 2015 are anticipated to be reduced by the fiscal year 2014-2015 sequestration rate of 7.3 percent, or approximately \$964,000 of the \$13.2 million originally projected to be received over this period. The sequestration reduction rate will be applied unless and until a law is enacted that cancels or otherwise impacts the sequester, at which time the sequestration reduction rate is subject to change. Metropolitan can offer no assurances as to future subsidy payments and expects that once it receives less than any full 35 percent subsidy payment, the United States Treasury will not thereafter reimburse Metropolitan for payments not made.

Other Revenue Obligations

As of ~~November~~February 1, ~~2014~~2015, Metropolitan had outstanding \$61.0 million of 2012 Series E Parity Bonds in two series, \$30.3 million of 2014 Series C Parity Bonds in three series, and \$57.8 million of 2014 Series G in five series, bearing interest in a term mode (the “Term Mode Bonds”). The Term Mode Bonds initially bear interest at a fixed rate for a specified period from their date of issuance, after which there shall be determined a new interest mode for each series (which may be another term mode, a daily mode, a weekly mode, a short-term mode or an index mode) or the Term Mode Bonds may be converted to bear fixed interest rates through the maturity date thereof. The owners of the Term Mode Bonds of a series must tender for purchase, and Metropolitan must purchase, all of the Term Mode Bonds of such series on the specified scheduled mandatory tender date of each term period for such series. The scheduled mandatory tender dates for the two series of the 2012 Series E Bonds are October 1, 2015 and October 1, 2016. For the three series of the 2014 Series C Bonds, the scheduled mandatory tender dates are October 1, 2019, October 1, 2020 and October 1, 2021. For the five series of the 2014 Series G Bonds, the scheduled mandatory tender dates are October 1, 2016, 2017, 2018, 2019, and 2020, respectively. Metropolitan may call the Term Mode Bonds on or after the Call Protection Date for each of the series of Term Mode Bonds.

Metropolitan will pay the principal of, and interest on, the Term Mode Bonds on parity with its other Parity Bonds. Metropolitan anticipates that it will pay the purchase price of tendered Term Mode Bonds from the proceeds of remarketing such Term Mode Bonds or from other available funds. Metropolitan’s obligation to pay the purchase price of such Term Mode Bonds is an unsecured obligation of Metropolitan that it would pay from Net Operating Revenues only after it has made payments and deposits with respect to

its Operating Revenues, the Bonds and Parity Obligations and other obligations secured by Net Operating Revenues. Metropolitan has not secured any liquidity facility or letter of credit to support the payment of the purchase price of Term Mode Bonds in connection with any scheduled mandatory tender. If the purchase price of the Term Mode Bonds of any series is not paid from the proceeds of remarketing or other funds following a scheduled mandatory tender, such Term Mode Bonds will then bear interest at a default rate of up to 12 percent per annum until purchased by Metropolitan or redeemed. If the purchase price of the Term Mode Bonds of any series is not paid on a scheduled mandatory tender date, such Term Mode Bonds will also be subject to special mandatory redemption, in part, 18, 36 and 54 months following the purchase default. Any such special mandatory redemption payment will constitute a Bond Obligation payable on parity with the Parity Bonds and the Parity Obligations.

Revolving Credit Agreement

On March 21, 2013, Metropolitan entered into a revolving credit agreement (“Revolving Credit Agreement”) with The Bank of New York Mellon (“BNY Mellon”). Under the terms and conditions of the Revolving Credit Agreement, Metropolitan may borrow up to \$96,545,900 for purposes of paying the purchase price of any Self-Liquidity Bonds. Under the Revolving Credit Agreement, a failure by Metropolitan to perform or observe certain covenants could result in a termination of BNY Mellon’s commitment and entitle BNY Mellon to declare all amounts then outstanding to be immediately due and payable. Metropolitan has secured its obligation to pay principal and interest under the Revolving Credit Agreement as a Parity Obligation under the Master Resolution. The scheduled expiration date of the Revolving Credit Agreement is March 31, 2016. Metropolitan has no obligation to make borrowings under the Revolving Credit Agreement, maintain the Revolving Credit Agreement or renew the Revolving Credit Agreement. See “—Limitations on Additional Revenue Bonds” above.

When Metropolitan entered into the Revolving Credit Agreement, it designated the principal and interest payable under the Revolving Credit Agreement as Excluded Principal Payments under the Master Resolution and thus, for purposes of calculating Maximum Annual Debt Service, included the amount of principal and interest due and payable under the Revolving Credit Agreement on a schedule of Assumed Debt Service. This schedule of Assumed Debt Service assumes that Metropolitan will pay the principal under the Revolving Credit Agreement over a period of 30 years at a fixed interest rate of 3.75 percent. Pursuant to the terms of the Master Resolution, while the Revolving Credit Agreement is in force and effect, when Metropolitan calculates its covenant relating to the creation or incurrence of additional indebtedness, it will add an amount to its Net Operating Revenues relating to an assumed annual debt service payment that Metropolitan would receive if it were to use the proceeds of the Revolving Credit Agreement to purchase Self-Liquidity Bonds.

Subordinate Revenue Obligations

Metropolitan currently is authorized to issue subordinate debt of up to \$400,000,000 of Commercial Paper Notes payable from Net Operating Revenues on a basis subordinate to the Parity Bonds and the Parity Obligations. Although no Commercial Paper Notes are currently outstanding, the authorization remains in full force and effect and Metropolitan may issue Commercial Paper Notes from time to time. In addition, Metropolitan obtained a \$20 million California Safe Drinking Water Revolving Fund Loan in 2003 at an interest rate of 2.39 percent per annum to reimburse construction costs for oxidation retrofit facilities at the Henry J. Mills Treatment Plant in Riverside County. The loan payment obligation is subordinate to the Parity Bonds and Parity Obligations. As of ~~November~~February 1, ~~2014~~2015, the principal balance outstanding was ~~\$14.2~~10.7 million.

General Obligation Bonds

As of ~~November 1, 2014, \$132,275,000~~ February 1, 2015, \$127,485,000 aggregate principal amount of general obligation bonds payable from *ad valorem* property taxes were outstanding. See “METROPOLITAN REVENUES — General” and “— Revenue Allocation Policy and Tax Revenues” in this Appendix A. Metropolitan's revenue bonds are not payable from the levy of *ad valorem* property taxes.

<u>General Obligation Bonds</u>	<u>Amount Issued⁽¹⁾</u>	<u>Principal Outstanding</u>
Waterworks General Obligation Refunding Bonds, 2004 Series A	\$ 68,345,000	\$ 7,090,000
Waterworks General Obligation Refunding Bonds, 2005 Series A*	60,105,000	5,670,000
	<u>64,705,000</u>	<u>5,670,000</u>
Waterworks General Obligation Refunding Bonds, 2009 Series A	45,515,000	33,650,000
Waterworks General Obligation Refunding Bonds, 2010 Series A	39,485,000	31,430,000
<u>Waterworks General Obligation Refunding Bonds, 2014 Series A</u>	<u>49,645,000</u>	<u>49,645,000</u>
Total	<u>\$218,050,000</u>	<u>\$132,275,000</u>
	<u>208,660,000</u>	<u>7,485,000</u>

Source: Metropolitan.

(1) Voters authorized Metropolitan to issue \$850,000,000 of Waterworks General Obligation Bonds, Election 1966, in multiple series, in a special election held on June 7, 1966. This authorization has been fully utilized. This table lists bonds that refunded such Waterworks General Obligation Bonds, Election 1966.

* ~~Metropolitan expects to issue its Waterworks General Obligation Refunding Bonds, 2014 Series A to refund all or a portion of these bonds.~~

State Water Contract Obligations

General. On November 4, 1960, Metropolitan entered into its State Water Contract with DWR, under which Metropolitan receives an entitlement to water service from the State Water Project. Subsequently, other public agencies also entered into water supply contracts with DWR, all of which were patterned after Metropolitan’s State Water Contract. Metropolitan’s State Water Contract accounts for nearly one-half of the total entitlement for State Water Project water contracted for by all contractors.

The State Water Contract will remain in effect until 2035 or until all DWR bonds issued to finance construction of project facilities are repaid, whichever is longer. At the expiration of the State Water Contract, Metropolitan has the option to continue service under substantially the same terms and conditions. In June 2014, DWR and State Water Project Contractors reached an AIP to extend the contract to 2085 and to make certain changes related to the financial management of the State Water Project in the future. See “METROPOLITAN’S WATER SUPPLY—State Water Project” in this Appendix A. As of November 1, 2014, the latest maturity of outstanding DWR bonds issued for such purpose was December 1, 2035.

Under the State Water Contract, Metropolitan is obligated to pay allocable portions of the cost of construction of the system and ongoing operating and maintenance costs through at least 2035, regardless of quantities of water available from the project. Other payments are based on deliveries requested and actual deliveries received, costs of power required for actual deliveries of water, and offsets for credits received. Metropolitan’s payment obligation for the State Water Project for the fiscal year ended June 30, 2014 was \$464.6 million, which amount reflects prior year’s credits of \$79.5 million. For the fiscal year ended June 30, 2014, Metropolitan’s payment obligations under the State Water Contract were approximately 31 percent of Metropolitan’s total annual expenditures. A portion of Metropolitan’s annual property tax levy is for payment of State Water Contract obligations, as described above under “METROPOLITAN REVENUES—General” in this Appendix A. See Note 9(a) to Metropolitan’s audited financial statements in

Appendix B for an estimate of Metropolitan's payment obligations under the State Water Contract. Also see "POWER SOURCES AND COSTS" in this Appendix A for a description of current and future costs for electric power required to operate State Water Project pumping systems and a description of litigation involving the federal relicensing of the Hyatt-Thermalito hydroelectric generating facilities at Lake Oroville.

The State Water Contract requires that in the event that Metropolitan fails or is unable to raise sufficient funds by other means, Metropolitan must levy upon all property within its boundaries not exempt from taxation a tax or assessment sufficient to provide for all payments under the State Water Contract. Currently, a portion of the capital costs under the State Water Contract are paid from *ad valorem* taxes levied by Metropolitan. In the opinion of Metropolitan's General Counsel, a tax increase to provide for additional payments under the State Water Contract would be within the exemption permitted under Article XIII A of the State Constitution as a tax to pay pre-1978 voter approved indebtedness.

Metropolitan capitalizes its share of system construction costs as participation rights in State Water Project facilities as such costs are billed by DWR. Unamortized participation rights essentially represent a prepayment for future water deliveries through the State Water Project system. Metropolitan's share of system operating and maintenance costs are annually expensed.

Metropolitan has entered into amendments to the State Water Contract that represent additional long-term obligations, as described below.

Devil Canyon-Castaic Contract. On June 23, 1972, Metropolitan and five other southern California public agencies entered into a contract (the "Devil Canyon-Castaic Contract") with DWR for the financing and construction of the Devil Canyon and Castaic power recovery facilities, located on the aqueduct system of the State Water Project. Under this contract, DWR agreed to build the Devil Canyon and Castaic facilities, using the proceeds of revenue bonds issued by DWR under the State Central Valley Project Act. DWR also agreed to use and apply the power made available by the construction and operation of such facilities to deliver water to Metropolitan and the other contracting agencies. Metropolitan, in turn, agreed to pay to DWR 88 percent of the debt service on the revenue bonds issued by DWR. For calendar year 2013, this represented a payment of \$6.7 million. In addition, Metropolitan agreed to pay 78.5 percent of the operation and maintenance expenses of the Devil Canyon facilities and 96 percent of the operation and maintenance expenses of the Castaic facilities. Metropolitan's obligations under the Devil Canyon-Castaic Contract continue until the bonds are fully retired in 2022 even if DWR is unable to operate the facilities or deliver power from these facilities.

Off-Aqueduct Power Facilities. In addition to system "on-aqueduct" power facilities costs, DWR has, either on its own or by joint venture, financed certain off-aqueduct power facilities. The power generated is utilized by the system for water transportation and other State Water Project purposes. Power generated in excess of system needs is marketed to various utilities and the California power exchange market. Metropolitan is entitled to a proportionate share of the revenues resulting from sales of excess power. By virtue of a 1982 amendment to the State Water Contract and the other water supply contracts, Metropolitan and the other water contractors are responsible for paying the capital and operating costs of the off-aqueduct power facilities regardless of the amount of power generated. Other costs of Metropolitan in relation to the State Water Project and the State Water Contract may increase as a result of restructuring of California's electric utility industry and new Federal Energy Regulatory Commission ("FERC") regulations.

East Branch Enlargement Amendment. In 1986, Metropolitan's State Water Contract and the water supply contracts of certain other State Water Project Contractors were amended for the purpose, among others, of financing the enlargement of the East Branch of the California Aqueduct. Under the amendment, enlargement of the East Branch can be initiated either at Metropolitan's request or by DWR finding that enlargement is needed to meet demands. Metropolitan, the other State Water Contractors on the East Branch, and DWR are currently in discussions on the timetable and plan for future East Branch enlargement actions.

The amendment establishes a separate subcategory of the Transportation Charge under the State Water Contract for the East Branch Enlargement and provides for the payment of costs associated with financing and operating the East Branch Enlargement. Under the amendment, the annual financing costs for such facilities financed by bonds issued by DWR are allocated among the participating contractors based upon the delivery capacity increase allocable to each participating contractor. Such costs include, but are not limited to, debt service, including coverage requirements, deposits to reserves, and certain operation and maintenance expenses, less any credits, interest earnings or other moneys received by DWR in connection with this facility.

If any participating contractor defaults on payment of its allocable charges under the amendment, among other things, the non-defaulting participating contractors may assume responsibility for such charges and receive delivery capability that would otherwise be available to the defaulting participating contractor in proportion to the non-defaulting contractor's participation in the East Branch Enlargement. If participating contractors fail to cure the default, Metropolitan will, in exchange for the delivery capability that would otherwise be available to the defaulting participating contractor, assume responsibility for the capital charges of the defaulting participating contractor.

Water System Revenue Bond Amendment. In 1987, the State Water Contract and other water supply contracts were amended for the purpose of financing State Water Project facilities through revenue bonds. This amendment establishes a separate subcategory of the Delta Water Charge and the Transportation Charge for projects financed with DWR water system revenue bonds. This subcategory of charge provides the revenues required to pay the annual financing costs of the bonds and consists of two elements. The first element is an annual charge for repayment of capital costs of certain revenue bond financed water system facilities under the existing water supply contract procedures. The second element is a water system revenue bond surcharge to pay the difference between the total annual charges under the first element and the annual financing costs, including coverage and reserves, of DWR's water system revenue bonds.

If any contractor defaults on payment of its allocable charges under this amendment, DWR is required to allocate a portion of the default to each of the nondefaulting contractors, subject to certain limitations, including a provision that no nondefaulting contractor may be charged more than 125 percent of the amount of its annual payment in the absence of any such default. Under certain circumstances, the nondefaulting contractors would be entitled to receive an allocation of the water supply of the defaulting contractor.

The following table sets forth Metropolitan's projected costs of State Water Project water, based upon DWR's Annual Billing to Metropolitan for calendar year 2015 and projections based on Metropolitan's adopted biennial budget for fiscal years 2014-15 and 2015-16. [For fiscal year 2014-15, projections are based on actual financial results through December 2014 and revised projections for the balance of the fiscal year.](#) If a Bay-Delta improvement alternative is identified and funding is approved, construction may commence in 2016. See "METROPOLITAN'S WATER SUPPLY—State Water Project—Bay-Delta Regulatory and Planning Activities" in this Appendix A.

**PROJECTED COSTS OF METROPOLITAN
FOR STATE WATER PROJECT WATER⁽¹⁾
(Dollars in Millions)**

Year Ending June 30	Capital Costs	Minimum OMP&R⁽²⁾	Power Costs⁽³⁾	Refunds & Credits	Total⁽⁴⁾
2015	\$ 161.9 <u>157.9</u>	\$ 182.2 <u>203.6</u>	\$ 189.5 <u>142.7</u>	\$(38.0 <u>56.1</u>)	\$ 495.6 <u>48.1</u>
2016	170.0	184.6	196.8	(36.3)	515.1
2017	183.6	190.1	212.6	(36.6)	549.7
2018	193.3	191.0	221.9	(36.4)	569.8
2019	206.6	192.6	235.2	(35.9)	598.4

Source: Metropolitan.

- (1) Projections are based upon DWR’s Annual Billing to Metropolitan for 2015 and attachments (dated July 1, 2014) and Metropolitan’s adopted biennial budget for fiscal years 2014-15 and 2015-16. The 2014-15 fiscal year, reflects actual financial results through December 2014 and revised projections for the balance of the fiscal year. All costs are adjusted from calendar year to fiscal year periods ending June 30. The total charges shown above differ from those shown in Note 9 of Metropolitan’s audited financial statements
(for the fiscal years ended June 30, 2014 and June 30, ~~2013~~2013, in Appendix B, due to the inclusion ~~above~~ of allowances for inflation and anticipated construction of additional State Water Project facilities. ~~The projections above also include State Water Project refunds and credits.~~ See “POWER SOURCES AND COSTS—State Water Project” in this Appendix A.
- (2) Minimum Operations, Maintenance, Power and Replacement (“OMP&R”) represents costs which are fixed and do not vary with the amount of water delivered.
- (3) Assumptions for water deliveries through the California Aqueduct (not including SBVMWD and ~~Desert Water~~DWA/CVWD transfers and exchanges) into Metropolitan’s service area and to storage programs are as follows: ~~0.91~~0.57 million acre-feet for fiscal year 2014-15, 0.91 million acre-feet for fiscal year 2015-16, 0.91 million acre-feet for fiscal year 2016-17, 0.93 million acre-feet for fiscal year 2017-18, and 0.93 million acre-feet for fiscal year 2018-19. Availability of State Water Project supplies vary and deliveries may include transfers and storage. All deliveries are within maximum contract amount and are based upon availability, as determined by hydrology, water quality and wildlife conditions. See “METROPOLITAN’S WATER SUPPLY—State Water Project—*Endangered Species Act Considerations*” in this Appendix A.
- (4) Annual totals include BDCP related costs for the fiscal years ended June 30, 2015 through June 30, 2019 of \$-0- in fiscal years 2014-15 and 2015-16, \$15 million in 2016-17, \$24 million in 2017-18, and \$46 million in 2018-19. Projected BDCP costs are reflected in the ten-year financial forecast provided in the biennial budget for fiscal years 2014-15 and 2015-16 that was approved by Metropolitan’s Board on April 8, 2014.

Other Long-Term Commitments

Metropolitan also has various ongoing fixed annual obligations under its contract with the United States Department of Energy for power from the Hoover Power Plant. Under the terms of the Hoover Power Plant contract, Metropolitan purchases energy to pump water through the Colorado River Aqueduct. In fiscal year 2013-14 Metropolitan paid approximately \$29.6 million under this contract. Payments made under the Hoover Power Plant contract are treated as operation and maintenance expenses. On March 12, 2014, Metropolitan and the other Hoover Contractors funded the defeasance of \$124 million of bonds issued by the U.S. Treasury Department for facilities related to the Hoover Dam and Power Plant. Following this repayment, Metropolitan expects to reduce its annual payment for Hoover power by approximately \$2.3 million. See “POWER SOURCES AND COSTS—Colorado River Aqueduct” in this Appendix A.

Defined Benefit Pension Plan and Other Post-Employment Benefits

Metropolitan is a member of the California Public Employees’ Retirement System (“PERS”), a multiple-employer pension system that provides a contributory defined-benefit pension for substantially all

Metropolitan employees. PERS provides retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. PERS acts as a common investment and administrative agent for participating public entities within the State. PERS is a contributory plan deriving funds from employee contributions as well as from employer contributions and earnings from investments. A menu of benefit provisions is established by State statutes within the Public Employees' Retirement Law. Metropolitan selects optional benefit provisions from the benefit menu by contract with PERS.

Metropolitan makes contributions to PERS based on actuarially determined employer contribution rates. The actuarial methods and assumptions used are those adopted by the PERS Board of Administration. Employees are required to contribute seven percent of their earnings (excluding overtime pay) to PERS. Pursuant to the current memoranda of understanding, Metropolitan contributes the requisite seven percent contribution for all employees represented by the Management and Professional Employees Association, the Association of Confidential Employees, Supervisors and Professional Personnel Association and AFSCME Local 1902 and who were hired prior to January 1, 2012. Employees in all four bargaining units who were hired on or after January 1, 2012, pay the full seven percent employee contribution to PERS. Metropolitan contributes the entire seven percent on behalf of unrepresented employees. In addition, Metropolitan is required to contribute the actuarially determined remaining amounts necessary to fund the benefits for its members.

The contribution requirements of the plan members are established by State statute and the employer contribution rate is established and may be amended by PERS. The fiscal year 2013-14 contribution requirement was based on the June 30, 2011 valuation report, the fiscal year 2014-15 contribution requirement is based on the June 30, 2012 valuation report, and the fiscal year 2015-16 contribution is based on the June 30, 2013 valuation report. The PERS' projected investment return (the discount rate) for fiscal years 2013-14, 2014-15, and 2015-16 is 7.5 percent, respectively.

For fiscal year 2013-14, Metropolitan contributed 16.3 percent of annual covered payroll. The fiscal year 2013-14 annual pension cost was \$47.4 million, of which \$13.5 million was for Metropolitan's pick-up of the employees' seven percent share. For fiscal year 2014-15 and fiscal year 2015-16, Metropolitan is required to contribute 17.65 percent and 19.74 percent, respectively, of annual covered payroll, in addition to member contributions paid by Metropolitan.

On April 17, 2013, the PERS Board of Administration approved changes to the amortization and smoothing policies to spread all gains and losses over a fixed 30-year period from a rolling 30-year period, and to recognize increases or decreases in investment returns over a 5-year period versus a 15-year period. In addition, PERS will no longer use an actuarial valuation of assets. These changes will result in higher employer contribution rates in the near term but lower rates in the long term. The new policies will be effective for fiscal year 2015-16. The following table shows the funding progress of Metropolitan's pension plan.

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**Metropolitan Pension Plan Assets
(dollars in billions)**

Valuation Date	Accrued Liability	Actuarial Value of Assets	Market Value of Assets	Funded (Unfunded)		Funded Ratios	
				Actuarial Value	Market Value	Actuarial Value	Market Value
6/30/13	\$1.805	N/A	\$1.356	N/A	\$.449	N/A	75.1%
6/30/12	\$1.731	\$1.471	\$1.227	(\$0.260)	(\$0.504)	85.0%	70.9%
6/30/11	\$1.674	\$1.416	\$1.257	(\$0.258)	(\$0.417)	84.5%	75.1%
6/30/10	\$1.563	\$1.351	\$1.059	(\$0.212)	(\$0.504)	86.4%	67.7%
6/30/09	\$1.478	\$1.287	\$0.940	(\$0.191)	(\$0.538)	87.1%	63.6%
6/30/08	\$1.334	\$1.232	\$1.256	(\$0.102)	(\$0.078)	92.3%	94.1%

Source: California Public Employees' Retirement System.

As of June 30, 2002, the actuarial and market values of assets in Metropolitan’s pension plan were approximately \$896 million and \$815 million, respectively, resulting in excess actuarial and market assets of \$95 million and \$13 million, respectively. The increase in unfunded liability since 2002 is due to the draw-down of excess assets relating to the employer pick-up of the employees’ seven percent share and prior asset losses in PERS investments, and the recognition of gains and losses on an actuarial basis over a “smoothing” period. The actuarial value of PERS assets since fiscal year 2003-04 is based on a policy to smooth the market value of investments over a fifteen-year period to reduce the volatility of employers’ future contributions and stabilize pension costs. However, in June 2009, the PERS Board adopted temporary modifications to the asset smoothing method in order to phase in over a three year period the impact of the 24 percent investment loss experienced in fiscal year 2008-09. In its June 2010 and June 2011 valuation reports, PERS continued the effects of the temporary modification. The phase-in provides short-term relief to local government employers and is designed to strengthen the long-term financial health of the pension funds. As described above, in its June 2013 valuation report, PERS has changed its amortization and smoothing methods in setting the fiscal year 2015-16 employer contribution rates. The changes will result in higher employer contribution rates in the near term but lower rates in the long term. For more information on the plan, see Appendix B - “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR ~~FISCAL YEARS~~THE SIX MONTHS ENDED JUNE 30, DECEMBER 31, 2014 ~~AND JUNE 30, 2013.~~and 2013 (UNAUDITED).”

Metropolitan currently provides post-employment medical insurance to retirees and pays the post-employment medical insurance premiums to PERS. On January 1, 2012, Metropolitan implemented a longer vesting schedule for retiree medical benefits, which applies to all new employees hired on or after January 1, 2012. Payments for this benefit were \$13.1 million in fiscal year 2013-14 and are estimated to be \$12.8 million in fiscal year 2014-15. Under Governmental Accounting Standards Board Statement No. 45,

Accounting and Financial Reporting by Employers for Post-employment Benefits Other Than Pensions, Metropolitan is required to account for and report the outstanding obligations and commitments related to such benefits, commonly referred to as other post-employment benefits (“OPEB”), on an accrual basis.

Metropolitan’s annual required contribution (“ARC”) for OPEB was \$39.9 million in fiscal year 2013-14. The ARC was based on a June 30, 2011 actuarial valuation using the entry-age normal actuarial cost method with contributions determined as a level percent of pay. The actuarial assumptions included (a) a 7.25 percent investment rate of return, (b) a general inflation component of 3.0 percent and (c) increases to basic medical premiums of 8.5 percent for non-Medicare plans for 2014, grading down to 5.0 percent for 2021 and thereafter. As of June 30, 2011, the date of the OPEB actuarial report, the unfunded OPEB liability was estimated to be \$367.7 million. The unfunded actuarial accrued liability is amortized over a fixed 30-year period starting with fiscal year 2007-08 and ending in 2037. ~~Assumption changes~~Changes to assumptions are amortized over a fixed 20-year period. Actuarial gains and losses are amortized over a rolling 15-year period. In its biennial budget for fiscal years 2012-13 and 2013-14, Metropolitan’s Board approved contributions to an irrevocable OPEB trust fund of \$5.0 million and \$10.0 million, respectively. During fiscal year 2012-~~13~~13, the Board approved funding of an additional \$25.0 ~~million.~~ During fiscal year 2013-14 the Board approved funding of an additional \$100.0 million. Accordingly, Metropolitan established an irrevocable OPEB trust fund in September 2013 with an initial deposit of \$40.0 million, ~~and deposited.~~ During fiscal year 2013-14 the Board approved funding of an additional \$100.0 million, and \$25.0 million per month from May through August ~~2014.~~2014 was deposited into the irrevocable OPEB trust fund.

A June 30, 2013 actuarial valuation was released in February of 2014. This valuation indicates that the ARC in fiscal years 2014-15 and 2015-16 are \$29.5 million and \$30.3 million, respectively. As of June 30, 2013 the unfunded OPEB liability was estimated to be \$315 million. This actuarial valuation used the same assumptions as the June 30, 2011 valuation except that actuarial gains and losses are amortized over a fixed 15 year period. As part of its biennial budget process, the Board approved the full funding of the ARC for fiscal years 2014-15 and 2015-16.

HISTORICAL AND PROJECTED REVENUES AND EXPENSES

The “Historical and Projected Revenues and Expenses” table below, for fiscal years 2010-11 and ~~2012-13, 2011-12~~, provides a summary of revenues and expenditures of Metropolitan prepared on a cash basis, which conforms to the Revenue Bond Resolution provisions regarding rates and additional Bonds (as defined in the Master Resolution) and Parity Obligations (as defined in the Master Resolution). See “METROPOLITAN EXPENDITURES—Limitations on Additional Revenue Bonds” in this Appendix A. Under cash basis accounting, water sales revenues are recorded when received (two months after billed) and expenses when paid (approximately one month after invoiced). The actual financial reports beginning in fiscal year 2012-13 and the financial projections for fiscal years 2014-15 through 2018-19 are prepared on a modified accrual basis. This is consistent with the adopted biennial budget for fiscal years 2014-15 and 2015-16, which was prepared on a modified accrual basis instead of a cash basis. The table does not reflect the accrual basis of accounting, which is used to prepare Metropolitan’s annual audited financial statements. The modified accrual basis of accounting varies from the accrual basis of accounting in the following respects: depreciation and amortization will not be recorded and payments of debt service will be recorded when due and payable. Under the modified accrual basis of accounting, revenues are recognized in the fiscal year in which they are earned and expenses are recognized when incurred. Thus water sales revenues are recognized in the month the water is sold and expenses are recognized when goods have been received and services have been rendered. The change to modified accrual accounting is for budgeting purposes and Metropolitan will continue to calculate compliance with its rate covenant, limitations on additional bonds and other financial covenants in the Resolutions in accordance with their terms.

The projections are based on assumptions concerning future events and circumstances that may impact revenues and expenses and represent management’s best estimates of results at this time. See

footnotes to the table below entitled “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” and “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES” for relevant assumptions, including projected water sales and average annual increase in the effective water rate, and “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES” for a discussion of potential impacts. Some assumptions inevitably will not materialize and unanticipated events and circumstances may occur. Therefore, the actual results achieved during the projection period will vary from the projections and the variations may be material.

Estimated revenues and expenses in the table below reflect, for fiscal year 2014-15, reflect actual financial results for the six-months ending December 31, 2014 and revised projections for the balance of the fiscal year, as reported to the Board in January 2015. Miscellaneous Revenues for fiscal year 2014-15, reflect the projected use of \$59.4 million from the Water Management Fund, to fund a like amount of costs for replenishing storage, purchasing transfers and funding drought response programs. Fiscal year 2015-16 reflects the adopted budget for this year. For fiscal years 2016-17 through 2018-19, the projections reflect the ten-year financial forecast provided in the biennial budget for fiscal years 2014-15 and 2015-16 that was approved on April 8, 2014, and 2014. This includes the projected issuance of additional bonds. Metropolitan anticipates issuing approximately \$140 million aggregate principal amount of debt of bonds through fiscal year 2018-19, to finance the CIP. See “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Revenues” in this Appendix A.

The projections in the table below assume that water sales will be 1.88 million acre-feet in fiscal year 2014-15. Water sales are projected to be 1.75 million acre-feet in, for each of fiscal year 2014-15 years 2015-16 through fiscal year 2018-19, respectively. 19. Rates and charges ~~will increase~~ increased by 1.5 percent on January 1, 2015 and will increase by 1.5 percent on January 1, 2016. Rates and charges are projected to increase 3.0 percent to 5.0 percent annually thereafter. Actual rates and charges to be effective in 2017 and thereafter are subject to adoption by Metropolitan’s Board. The projections were prepared by Metropolitan and have not been reviewed by independent certified public accountants or any entity other than Metropolitan. Dollar amounts are rounded.

Metropolitan’s resource planning projections are developed using a comprehensive analytical process that incorporates demographic growth projections from recognized regional planning entities, historical and projected data acquired through coordination with local agencies, and the use of generally accepted empirical and analytical methodologies. See “METROPOLITAN’S WATER SUPPLY—Integrated Water Resources Plan” and “—The Integrated Resources Plan Strategy” in this Appendix A. Metropolitan has conservatively set the water sales projections in the following table which are below its projections for resource planning purposes. Metropolitan estimates that its water sales projections have a seventy percent statistical likelihood of being exceeded, compared to the fifty percent exceedance levels in the projections of water sales used to set prior years’ budgets and rates. Nevertheless, Metropolitan’s assumptions have been questioned by directors representing SDCWA on Metropolitan’s Board. Metropolitan has reviewed SDCWA’s concerns and, while recognizing that assumptions may vary, believes that the estimates and assumptions that support Metropolitan’s projections are reasonable based upon history, experience and other factors as described above.

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HISTORICAL AND PROJECTED REVENUES AND EXPENSES^(a)
(Dollars in Millions)

	-----Actual-----				-----Projected-----				
	2011	2012	2013	2014	2015	2016	2017	2018	2019
Water Sales ^(b)	\$996	\$1,062	\$1,283	\$1,485	\$1,296 395	\$1,314	\$1,338	\$1,378	\$1,422
Additional Revenue Sources ^(c)	153	168	173	182	199	199	196	198	202
Total Operating Revenues	1,149	1,230	1,456	1,667	1,495 94	1,513	1,534	1,576	1,624
O&M, CRA Power and Water Transfer Costs ^(d)	(531)	(476)	(456)	(512)	(567) 671	(577)	(587)	(613)	(640)
Total SWC OMP&R and Power Costs ^(e)	(322)	(316)	(337)	(342)	(364) 315	(374)	(396)	(408)	(425)
Total Operation and Maintenance	(853)	(792)	(793)	(854)	(928) 986	(951)	(983)	(1,021)	(1,065)
Net Operating Revenues	\$ 296	\$ 438	\$ 663	\$ 813	\$567 608	\$562	\$ 551	\$555	\$559
Miscellaneous Revenue ^{(f)(p)}	74	56	23	19	78 1	18	18	18	18
Sales of Hydroelectric Power ^(g)	22	31	25	15	19 5	19	20	21	21
Interest on Investments ^(h)	17	11	(2)	19	16 15	28	33	32	32
Adjusted Net Operating Revenues ⁽ⁱ⁾	409	536	709	866	619 709	627	622	626	630
Bonds and Additional Bonds Debt Service ⁽ⁱ⁾	(277)	(297)	(298)	(343)	(276) 280	(309)	(310)	(313)	(307)
Subordinate Revenue Obligations ^(k)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Funds Available from Operations	\$ 131	\$ 238	\$ 410	\$ 522	\$ 342 428	\$ 317	\$ 311	\$ 312	\$ 322
Bonds and Additional Bonds Debt Service Coverage ^(l)	1.48	1.81	2.38	2.52	2.24 2.54	2.03	2.01	2.00	2.06 2.05
Debt Service Coverage on all Obligations ^(m)	1.47	1.80	2.37	2.51	2.23 2.53	2.02	2.00	1.99	2.05
Funds Available from Operations	\$ 131	\$ 238	\$ 410	\$ 522	\$ 342 428	\$ 317	\$ 311	\$ 312	\$ 322
Other Revenues (Expenses)	(2)	(3)	(5)	(6)	(8)	(8)	(8)	(9)	(9)
Pay-As-You Go Construction	(45)	(45)	(55)	(117)	(245)	(221)	(200)	(204)	(201)
Water Transfer Capital Costs	0	0	0	0	0	0	0	0	0
Total SWC Capital Costs Paid from Current Year Operations	(119)	(112)	(88)	(68)	(68) 61	(72)	(83)	(84)	(89)
Remaining Funds Available from Operations	(35)	77	262	331	114	16	20	15	23
Fixed Charge Coverage ⁽ⁿ⁾	1.03	1.31	1.83	2.10	1.79 2.0	-	1.64	1.58	1.59
Property Taxes	88	90	95	95	90	92	94	96	99
General Obligation Bonds Debt Service	(39)	(39)	(40)	(40)	(23) 22	(23)	(23)	(19)	(14)
SWC Capital Costs Paid from Taxes	(49)	(51)	(55)	(55)	(67) 68	(69)	(71)	(77)	(85)
Net Funds Available from Current Year ^(o)	\$(35)	\$77	\$262	\$331	\$21 114	\$16	\$20	\$14 15	\$22 23
PAYGO Funded from Prior Year Revenues						\$(47)	\$(75)	\$(32)	
<u>Operations Funded from Prior Year Revenues^(p)</u>					<u>\$(59)</u>				

Source: Metropolitan.

Draft Dated 2/26/15

- (a) Unaudited. Prepared on a cash basis for fiscal years ended June 30, 2011 through fiscal year ending June 30, 2012, and on a modified accrual basis for fiscal years ending June 30, 2013 through June 30, 2019. Projected revenues and expenditures are based on assumptions and estimates used in the adopted 2014-15 and 2015-16 biennial budget and reflect the projected issuance of additional bonds. Projected revenues and expenditures for fiscal year ~~2013~~2014-1415 include actual financial results for July ~~2013~~March~~2014-~~December 2014 with revised projections for the balance of the fiscal year. *(Footnotes continued on next page)*

(Footnotes continued on next page)

(Footnotes continued from previous page)

- (b) During the fiscal years ended June 30, 2011 through June 30, 2014, annual water sales (in acre-feet) were 1.63 million, 1.68 million (including 225,000 acre-feet of replenishment sales), 1.86 million, and 2.04 million, respectively. See "METROPOLITAN REVENUES—Water Sales Revenues," the table entitled "SUMMARY OF WATER SOLD AND WATER SALES" in this Appendix A. The water sales projections (in acre-feet) are ~~1.75~~1.88 million in fiscal years 2014-15, and 1.75 million for 2015-16, ~~2016-17, 2017-18, and through~~ 2018-19. Projections reflect Board adopted rate and charge increases of 1.5 percent, which ~~will become~~ became effective on January 1, 2015 and 1.5 percent, which will become effective on January 1, 2016. Rates and charges are projected to increase 3.0 percent to 5.0 percent per fiscal year thereafter, subject to adoption by Metropolitan's Board. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES" below.
- (c) Includes receipts from water standby, readiness-to-serve and capacity charges. The term Operating Revenues excludes *ad valorem* taxes. See "METROPOLITAN REVENUES — Additional Revenue Components" in this Appendix A.
- (d) Water Transfer Costs are included in operation and maintenance expenses for purposes of calculating the debt service coverage on all Obligations.
- (e) Includes on and off aqueduct power and operation, maintenance, power and replacement costs payable under the State Water Contract. See "METROPOLITAN EXPENDITURES—State Water Contract Obligations" in this Appendix A.
- (f) May include lease and rental net proceeds, net proceeds from sale of surplus property, reimbursements, and federal interest subsidy payments for Build America Bonds. Federal interest subsidy payments for Build America Bonds in fiscal years 2014-15 to 2018-19 are projected to be \$12.2 million and reflect a 7.3 percent reduction pursuant to federal budget sequestration. Includes in fiscal year 2010-11, \$8 million from surplus property sales and a \$28.2 million capital reimbursement received from the Calleguas Municipal Water District in fiscal year 2010-11 related to termination of the Las Posas water storage program. See "REGIONAL WATER RESOURCES—Local Water Supplies—Groundwater Storage Programs" in this Appendix A. Also includes in fiscal year 2011-12 \$27.5 million from CVWD for delivery of 105,000 acre-feet under an exchange agreement between Metropolitan and CVWD. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct—Quantification Settlement Agreement" in this Appendix A. For fiscal year 2014-15, reflects use of \$59.4 million from the Water Management Fund.
- (g) Includes Colorado River Aqueduct power sales.
- (h) Does not include interest applicable to Bond Construction Funds, the Excess Earnings Funds, other trust funds and the Deferred Compensation Trust Fund. Fiscal year 2012-13 included Fair Value Adjustment of \$(13.8) million, as per modified accrual accounting
- (i) Adjusted Net Operating Revenues is the sum of all available revenues that the revenue bond resolutions specify may be considered by Metropolitan in setting rates and issuing additional Bonds and Parity Obligations.
- (j) Includes debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011 and additional Bonds (projected). Assumes issuance of additional Bonds as provided in budget assumptions for the adopted biennial budget for fiscal years 2014-15 and 2015-16 as follows: \$-0- in each fiscal year for fiscal year 2014-15 through fiscal year 2016-17, \$40 million in fiscal year 2017-18, and \$100 million in fiscal year 2018-19. For fiscal years 2013-14 and 2014-15, reflects the defeasance of the 2004 Series B Water Revenue Refunding Bonds, payable on July 1, 2014, through a payment of ~~Metropolitan funds~~ \$33.7 million to an escrow account on May 29, 2014. See "CAPITAL INVESTMENT PLAN—Capital Investment Plan Financing" in this Appendix A.
- (k) Consisting of subordinate lien California Safe Drinking Water Revolving Fund Loan debt service.
- (l) Adjusted Net Operating Revenues divided by the sum of debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011 and additional Bonds (projected). ~~For fiscal years 2013-14 and 2014-15, reflects the defeasance of the 2004 Series B Water Revenue Refunding Bonds, payable on July 1, 2014, through a payment of Metropolitan funds to an escrow account on May 29, 2014.~~
- (m) Adjusted Net Operating Revenues, divided by the sum of debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011, the subordinate lien California Safe Drinking Water Revolving Fund Loan and additional Bonds (projected). See "METROPOLITAN EXPENDITURES—Subordinate Revenue Obligations" in this Appendix A. ~~For fiscal years 2013-14 and 2014-15, reflects the defeasance of the 2004 Series B Water Revenue Refunding Bonds, payable on July 1, 2014, through a payment of Metropolitan funds to an escrow account on May 29, 2014.~~
- (n) Adjusted Net Operating Revenues, divided by the sum of State Water Contract capital costs paid from current year operations and debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011, the subordinate lien California Safe Drinking Water Revolving Fund Loan, and additional Bonds (projected). ~~For fiscal years 2013-14 and 2014-15, reflects the defeasance of the 2004 Series B Water Revenue Refunding Bonds, payable on July 1, 2014, through a payment of Metropolitan funds to an escrow account on May 29, 2014.~~
- (o) For Fiscal Year 2012-13, includes amounts that were transferred prior to June 30, 2013: \$25 million to the Water Transfer Fund, \$25 million to a trust to pre-fund Metropolitan's unfunded liability for other post-employment benefits, and \$25 million for PAYGO Construction. For Fiscal Year 2013-14, includes amounts transferred prior to June 30, 2014: \$100 million to a trust to pre-fund Metropolitan's unfunded liability for other post-employment benefits; \$100 million for PAYGO Construction; ~~an amount currently estimated at~~ \$232 million to the Water Management Fund, for water purchases to replenish storage and funding drought response programs. See "METROPOLITAN REVENUES-Financial Reserve Policy" in this Appendix A.
- (p) Reflects use of \$59.4 million from the Water Management Fund.

MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES

Water Sales Revenues

Metropolitan relies on revenues from water sales for about 80 to 85 percent of its total revenues. In adopting the budget and rates and charges for each fiscal year, Metropolitan's board reviews the anticipated revenue requirements and projected water sales to determine the rates necessary to produce substantially the revenues to be derived from water sales during the fiscal year. Metropolitan sets rates and charges estimated

to provide operating revenues sufficient, with other sources of funds, to provide for payment of its expenses. See “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

Metropolitan’s Board has adopted annual increases in water rates each year beginning with the rates effective January 1, 2004. See “METROPOLITAN REVENUES—Rate Structure” and “—Classes of Water Service” in this Appendix A. On April 10, 2012, Metropolitan’s Board adopted water rate increases of 5.0 percent, effective January 1, 2013 and January 1, 2014. On April 8, 2014, Metropolitan’s Board adopted a 1.5 percent water rate increase, ~~to become~~which became effective January 1, 2015, and an additional 1.5 percent water rate increase to become effective January 1, 2016.

The financial projections in the table above reflect the ten-year financial forecast provided in the biennial budget for fiscal years 2014-15 and 2015-16 that was approved by the Board on April 8, 2014. The 2014-15 and 2015-16 biennial budget and rates set the stage for predictable and reasonable rate increases over the ten-year planning period, with rates projected to increase 3.0 percent to 5.0 percent per year. Actual rates and charges to be effective in 2017 and thereafter are subject to adoption by Metropolitan’s Board as part of the biennial budget process, and the ten-year forecast will be updated as well.

Increases in rates and charges reflect increasing operations and maintenance costs due primarily to an increase in retirement-related benefit costs, higher pay-as-you-go funding levels for the next two fiscal years of approximately \$513 million for the CIP, and increasing State Water Project costs when compared to fiscal year 2013-14. However, higher levels of revenue funding for the CIP and the use of reserves over target reduce revenue requirements in the later years of the forecast.

Metropolitan’s revenues exceeded expenses during fiscal year 2013-14, resulting in a substantial increase in its unrestricted reserves as of June 30, 2014. Metropolitan’s unrestricted reserves were \$487 million on June 30, 2014, on a modified accrual basis. On April 8, 2014, Metropolitan’s Board approved the use of unrestricted reserves over the target level at June 30, 2014 as follows: \$100 million deposit to the Replacement and Refurbishment Fund for pay-as-you-go funding of the CIP; \$100 million deposited to the Other Post-Employment Benefits (OPEB) Trust; and the remaining amount of over target reserve levels, ~~\$252.232~~232 million, to a Water Management Fund, ~~\$232 million of~~ which will cover costs associated with replenishing storage, purchasing transfers and funding drought response programs, ~~and \$20 million for conservation-related programs~~. These amounts include \$137 million held in Metropolitan’s financial reserves pursuant to the exchange contract between Metropolitan and SDCWA due to SDCWA’s litigation challenging Metropolitan’s rate structure (see “METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority” and “METROPOLITAN REVENUES—Litigation Challenging Rate Structure” in this Appendix A).

Water Sales Projections

Water sales forecasts in the table above are: 1.88 million acre-feet in fiscal year 2014-15, and 1.75 million acre-feet ~~in~~, for each of fiscal years ~~2014-15~~2015-16 through 2018-19. For purposes of comparison, Metropolitan’s highest water sales during the past six fiscal years was approximately 2.3 million acre-feet in fiscal year 2007-08 and lowest was 1.63 million acre-feet in fiscal year 2010-11. See “METROPOLITAN REVENUES—Water Sales Revenues” in this Appendix A.

Metropolitan’s water sales projections are the result of a comprehensive retail demand, conservation, and local supply estimation process, including supply projections from member agencies and other water providers within Metropolitan’s service area. Retail demands for water are estimated with a model driven by projections of relevant demographics provided by SCAG and SANDAG. Retail demands are adjusted downward for conservation savings and local supplies, with the remainder being the estimated demand for Metropolitan supplies. Conservation savings estimates include all conservation programs in place to date as well as estimates of future conservation program goals that will result from regional 20 percent reductions by

2020 conservation savings. See “METROPOLITAN’S WATER SUPPLY—Water Conservation” in this Appendix A. Local supplies include water produced by local agencies from various sources including but not limited to groundwater, surface water, locally-owned imported supplies, and recycled water (see “REGIONAL WATER RESOURCES”). For example, water sales projections for both years of the biennial budget for fiscal years 2014-15 and 2015-16 assume that local projects such as groundwater recovery and desalination projects (see “REGIONAL WATER RESOURCES—Local Water Supplies”) will become operational and produce local supplies in 2016. For additional description of Metropolitan’s water sales projections, see “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

The water sales projections used to determine water rates and charges assume an average year hydrology. Actual water sales are likely to vary from projections. Over the ten-year period from fiscal year 2004-05 through fiscal year 2013-14, actual water sales exceeded budgeted sales for the fiscal year in five fiscal years, with the greatest positive variance in fiscal year 2013-14 when actual sales of 2.04 million acre-feet were 120 percent of budgeted sales (1.70 million acre-feet). Actual sales were less than budgeted sales in five fiscal years, with the greatest negative variance in fiscal year 2010-11 when actual sales of 1.63 million acre-feet were 84 percent of budgeted sales (1.93 million acre-feet). In years when actual sales exceed projections, the revenues from water sales during the fiscal year will exceed budget, potentially resulting in an increase in financial reserves. In years when actual sales are less than projections, Metropolitan uses various tools to manage reductions in revenues, such as reducing expenses below budgeted levels, reducing funding of capital from revenues, and drawing on reserves. See “METROPOLITAN REVENUES—Financial Reserve Policy” in this Appendix A. Metropolitan considers actual sales, revenues and expenses, and financial reserve balances in setting rates for future fiscal years.

Operation and Maintenance Expenses

Operation and maintenance expenses in fiscal year 2013-14 were \$854 million, which represented approximately 57 percent of total costs. These expenses include the costs of labor, electrical power, materials and supplies of both Metropolitan and its contractual share of the State Water Project. The cost of power for pumping water through the aqueducts is a major component of this category of expenditures.

Metropolitan’s Board adopted a budget benchmark in September 2004 to limit the annual increase in departmental operations and maintenance budgets to no more than the five-year rolling average change in the Los Angeles/Orange/Riverside Counties consumer price index. The fiscal year 2013-14 departmental expenses of \$369 million were approximately 7.0 percent and 6.4 percent higher than expenses in fiscal years 2012-13 and 2011-12, respectively.

POWER SOURCES AND COSTS

General

Current and future costs for electric power required for operating the pumping systems of the Colorado River Aqueduct and the State Water Project are a substantial part of Metropolitan’s overall expenses. Expenditures for electric power for the Colorado River Aqueduct (not including credits from power sales and related revenues) for the fiscal years 2011-12, 2012-13 and 2013-14 were approximately \$30.0 million, \$18.4 million, and \$29.6 million, respectively. Expenditures for electric power and transmission service for the State Water Project for fiscal years 2011-12, 2012-13 and 2013-14 were approximately \$214.1 million, \$218.1 million and \$157.4 million, respectively. Given the continuing uncertainty surrounding the electricity markets in California and in the electric industry in general, Metropolitan is unable to give any assurance with respect to the magnitude of future power costs.

Colorado River Aqueduct

Generally 55 to 70 percent of the annual power requirements for pumping at full capacity (1.25 million acre-feet of Colorado River water) in Metropolitan's Colorado River Aqueduct are secured through long-term contracts with the United States Department of Energy for energy generated from facilities located on the Colorado River (Hoover Power Plant and Parker Power Plant) and Edison. These contracts provide Metropolitan with reliable and economical power resources to pump Colorado River water to Metropolitan's service area.

On December 20, 2011, President Obama signed into law the Hoover Power Allocation Act of 2011 (H.R. 470). This new law requires the Western Area Power Administration to renew existing contracts for electric energy generated at the Hoover Power Plant for an additional 50 years through September 2067. The contractors will retain 95 percent of their existing power rights. The law will allow Metropolitan to continue to receive a significant amount of power from the Hoover power plant after the current contract expires in 2017.

The remaining approximately 30 to 45 percent of annual pumping power requirements for full capacity pumping on the Colorado River Aqueduct is obtained through energy purchases from municipal and investor-owned utilities or power marketers. Gross diversions of water from Lake Havasu for the fiscal years ended June 30, 2013 and June 30, 2014 were approximately 767,622 acre-feet and 1,117,578 acre-feet, respectively, including Metropolitan's basic apportionment of Colorado River water and supplies from water transfer and groundwater storage programs.

The Metropolitan-Edison 1987 Service and Interchange Agreement includes provisions for the sharing of the benefits realized by the integrated operation of Edison's and Metropolitan's electric systems. Under this agreement, with a prior year pumping operation of 1 million acre-feet, Edison provides Metropolitan additional energy (benefit energy) sufficient to pump approximately 140,000 acre-feet annually. As the amount of pumping is increased, the amount of benefit energy provided by Edison is reduced.

Under maximum pumping conditions, Metropolitan can require up to one million megawatt-hours per year in excess of the base resources available to Metropolitan from the Hoover Power Plant, the Parker Power Plant, and Edison benefit energy. Metropolitan is a member of the Western Systems Power Pool ("WSPP"), and utilizes its industry standard form contract to make wholesale power purchases at market cost. Metropolitan acquires the majority of its supplemental power from WSPP members. In calendar years 2010 and 2011, Metropolitan purchased 755,000 megawatt-hours and 100,000 megawatt-hours, respectively, of energy above its base power resources. In calendar year 2013, Metropolitan pumped approximately 1.013 million acre-feet of its Colorado River water and additional supplies from other Colorado River sources but did not purchase any additional energy supplies above its base power resources.

State Water Project

The State Water Project's power requirements are met from a diverse mix of resources, including State-owned hydroelectric generating facilities. DWR has long-term contracts with Morgan Stanley (unspecified energy sources), Metropolitan (hydropower), Kern River Conservation District (hydropower) and the Northern California Power Agency (natural gas generation). The remainder of its power needs is met by short-term purchases. Metropolitan pays approximately 70 percent of State Water Project power costs.

DWR is seeking renewal of the license issued by FERC for the State Water Project's Hyatt-Thermalito hydroelectric generating facilities at Lake Oroville. A Settlement Agreement containing recommended conditions for the new license was submitted to FERC in March 2006. That agreement was signed by over 50 stakeholders, including Metropolitan and other State Water Project Contractors. With only

a few minor modifications, FERC staff recommended that the Settlement Agreement be adopted as the condition for the new license. DWR issued a Final EIR for the relicensing project on July 22, 2008. On August 21, 2008, Butte County and Plumas County filed separate lawsuits against DWR challenging the adequacy of the Final EIR. This lawsuit also named all of the signatories to the Settlement Agreement as “real parties in interest,” since they could be adversely affected by this litigation. A trial was conducted in January 2012. On May 16, 2012, the court found that the EIR prepared in conjunction with the relicensing was adequate and dismissed the lawsuit against DWR. On August 7, 2012, Butte and Plumas Counties filed a notice of appeal. Briefing on the appeal was completed in May 2013. No date has been set for oral argument. Regulatory permits and authorizations are required before the new license can take effect. Chief among these is a biological opinion from the National Marine Fisheries Service setting forth the terms and conditions under which the relicensing project must operate in order to avoid adverse impacts to threatened and endangered species. DWR has filed an application requesting this biological opinion. FERC has issued one-year renewals of the existing license since its initial expiration date on January 31, 2007, and is expected to issue successive one-year renewals until a new license is obtained.

DWR receives transmission service from investor-owned utilities under existing contracts and from the California Independent System Operator, a nonprofit public benefit corporation formed in 1996 pursuant to legislation that restructured and deregulated the electric utility industry in California. The transmission service provider may seek increased transmission rates, subject to the approval of FERC. DWR has the right to contest any such proposed increase. DWR may be subject to increases in the cost of transmission service as new electric grid facilities are constructed.

Energy Management Program

Metropolitan staff completed a comprehensive Energy Management and Reliability Study in late 2009 and Metropolitan’s Board adopted energy management policies in August 2010 that provide objectives for future energy-related projects to contain costs and reduce Metropolitan’s exposure to energy price volatility, increase operational reliability through renewable energy projects, provide a revenue stream to offset energy costs and move Metropolitan toward energy independence.

Metropolitan’s Energy Management Program mandates that Metropolitan design and operate its facilities in the most energy-efficient and cost-effective manner. This program includes: setting design standards for energy-efficient facilities; taking advantage of available rebates for energy efficiency and energy-saving projects; operating Metropolitan’s facilities in the most energy-efficient manner; and continuing to investigate alternative energy sources, such as solar and wind power. Metropolitan has completed energy efficiency assessments at all five of its water treatment plants and is evaluating recommendations for proposed changes. Metropolitan has completed construction of a one-megawatt solar generation facility at the Robert A. Skinner Treatment Plant and is investigating additional solar power generation at other treatment plants and facilities. Metropolitan has begun integrating fuel-efficient hybrid vehicles into its fleet and assessing the use of alternative fuels (biodiesel) for its off-road vehicles and construction equipment. Finally, Metropolitan is assessing the feasibility of expanding its hydroelectric generation capabilities.

In February 2007, the Board authorized Metropolitan’s membership in the California Climate Action Registry, a nonprofit voluntary registry for greenhouse gas emissions that was established by the Legislature in 2000. Metropolitan began annual reporting of its certified baseline greenhouse gas inventory, or carbon footprint, in calendar year 2005 to the California Climate Action Registry. In calendar year 2010, Metropolitan’s emissions reporting transitioned from the California Climate Action Registry to The Climate Registry, a nonprofit North American emission registry. Metropolitan also reports required emissions data to the California Air Resources Board (“CARB”) under mandatory reporting regulations adopted pursuant to AB 32, California’s Global Warming Solutions Act. On December 16, 2010, CARB adopted a regulation for a California cap on greenhouse gas emissions under AB 32, and after additional workshops, public comment

Draft Dated 2/26/15

and further consideration, approved the regulation on October 20, 2011, with compliance deferred to 2013. Under the regulation, Metropolitan is regulated as an importer of energy and is required to purchase allowances to cover any greenhouse gas emissions associated with its supplemental imported energy. Metropolitan did not incur cap and trade allowance obligations in 2013. However, Metropolitan ~~will~~did incur an obligation in ~~2014 and possibly in later years.~~2014. As of ~~October~~December 31, 2014, Metropolitan has spent approximately \$3.3 million on cap and trade compliance instruments, such as allowances and offsets.

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C H A P T E R

4

FUND POLICIES

INTRODUCTION

The Metropolitan Water District holds investments and cash balances in various funds (accounts) designated for certain purposes as follows:

- ◆ Operating Funds
- ◆ Debt Service Funds
- ◆ Construction Funds
- ◆ Rate Stabilization Funds
- ◆ State Water Contract Fund
- ◆ Trust and Other Funds

Within these categories the District currently maintains 60 active funds which are designated according to purpose. Depending on legal limitations, the individual funds are either restricted (can only be used for a designated purpose), or unrestricted (can be used for any lawful purpose at the discretion of the Board). This chapter will review the current and past reserve policies and analyze proposed policies for holding reserves for the purpose of providing stable and predictable Water Rates.

DESCRIPTION OF FUNDS

◆ OPERATING FUNDS

Operating funds include the *Operations and Maintenance Fund*, a restricted fund in which the District is required to maintain two months of projected operations and maintenance expense to comply with covenants made to holders of outstanding District revenue bonds. Within the *General Fund*, used for general purposes of the District, and the *Revenue Remainder Fund*, the District holds its working capital for emergencies and claims and for revenue shortfalls. The *Water Transfer Fund* is used to fund water transfer and storage programs, to purchase options on future water transfers and will be used to fund the initial filling of the Eastside Reservoir Project.

◆ **DEBT SERVICE FUNDS**

Debt service funds include all of the District's interest and principal funds used to pay debt service on the District's outstanding revenue and general obligation bonds, and interest on outstanding commercial paper. Also included are the revenue bond reserve funds held in accordance with bond covenants to satisfy debt service requirements if there are insufficient monies in the interest and principal funds.

◆ **CONSTRUCTION FUNDS**

Construction funds are designated to pay the design and construction costs of the District's ongoing capital improvement program. They include the *1966 G.O. Bond Construction Fund*, the *Revenue Bond Construction Fund*, the *Pay-As-You-Go Fund (PAYG)*, and the *Commercial Paper Note Construction Fund*. The *PAYG Fund* is used to finance a portion of the capital program from current revenues, primarily from the sale of water, to reduce the need to issue debt. The *PAYG Fund* is discussed further in Chapter 5. The bond and commercial paper construction funds are used to finance capital works from proceeds from the sale of the associated debt instruments.

◆ **RATE STABILIZATION FUNDS**

Rate stabilization funds include the *Water Rate Stabilization Fund* and the *Water Treatment Surcharge Stabilization Fund*. These monies are used to smooth out and or mitigate future water rate increases and/or future increases in the treatment surcharge.

◆ **STATE WATER CONTRACT FUND**

The *State Water Contract Fund* is designated for payment of capital charges under the State Water Contract (SWC). Under Board policy the fund is required to hold a minimum balance on June 30 and December 31 of each year sufficient to pay the SWC capital charges due on July 1 and January 1, respectively. The *Special Tax Fund* holds annexation fees which are transferred to the State Contract Fund to pay a portion of the State contract capital charges.

◆ **TRUST & OTHER FUNDS**

Monies held in the District's various trust funds can be used solely for the specific purposes for which the funds were created. The trust funds include the *Employee Deferred Compensation Trust Fund*, the *San Joaquin Reservoir Trust Fund*, the *Iron Mountain Landfill Closure/ Postclosure Maintenance Trust Fund*, the *Bond Excess Earnings Fund*, and escrow accounts held to pay certain costs and to defease certain maturities of outstanding bonds. Under revised federal regulations the *Employee Deferred Compensation Trust Fund* will not be carried as an asset on Metropolitan's financial statements after June 30, 1998.

◆ **CURRENT FUND BALANCES**

As of June 30, 1998, the District held the following amounts in investments and cash balances:

**TABLE 1.
CASH AND INVESTMENTS BY FUND JUNE 30, 1998**

(Dollars in Millions)	Restricted	Unrestricted		Total
		Committed	Uncommitted	
Operating Funds:				
General and Revenue Remainder Funds ¹		\$ 175		\$ 175
O&M Fund	\$ 79			79
Water Transfer Fund	36			36
Water Standby Fund	-			-
Sub-Total Operating Funds	\$ 115	\$ 175	-	\$ 290
Debt Service Funds:				
Debt Service Interest and Principal	145			145
Revenue Bond Reserve	15			15
Sub-Total Debt Service Funds	\$ 160	-	-	\$ 160
Construction Funds:				
Revenue Bond and Commercial Paper	589			589
Pay-As-You-Go		51	90	141
Sub-Total Construction Funds	\$ 589	\$ 51	\$ 90	\$ 730
Other Funds:				
Rate Stabilization Funds		111		111
State Water Contract Fund	69			69
Trust and Other Funds	202			202
Sub-Total Other Funds	\$ 271	\$ 111	-	\$ 382
Total Funds:	\$ 1,135	\$ 337	\$ 90	\$ 1,562

(1) The General and Revenue Remainder Funds hold Metropolitan's "Working Capital" Reserve under the current reserve policies.

Restricted funds can only be used for the specific purpose for which they were created. The restriction can be by law, as with legally required bond funds, or by Board action, as with the Water Transfer Fund or the State Water Contract Fund.

Unrestricted funds can be used for any lawful purpose of Metropolitan but can be committed by Board policy for specific use as with the working capital funds held in the General Fund and the Revenue Remainder Fund or the Water Rate Stabilization Fund which is used to mitigate or smooth future rate increases.

REVIEW OF RESERVE POLICY

◆ **BACKGROUND**

A key financial objective of the District is to maintain flexibility in managing its financial resources. It is necessary to keep certain funds in reserve to comply with statutory,

covenanted, or contractual requirements. In a larger context, the financial obligations of the District must be met from current revenues or by issuance of debt, with reserves, maintained for financial security. An appropriate level for the magnitude of reserves has previously been established based on such factors as variability of operating revenues, the ratio of fixed costs to variable revenues, levels of risk considered acceptable and the overall financial security of the District.

Since the 1970's Metropolitan's Board has reviewed and changed Metropolitan's reserve policy six times. All of these changes considered: Metropolitan's overall financial condition, the reliance on variable commodity revenues, the total level of fixed obligations, variability in sales and other factors, and actual events as they occurred, to arrive at a method for deriving an appropriate level of reserves. The goal of each of these reviews by the Board was to develop a reserve policy that balanced financial security and water rate stability against the costs of the policy to the Member Agencies. History has shown the impacts to the water rate of not having a balanced policy. The extremely wet winter of 1983 so severely decreased fiscal year 1982-83 water sales revenues that nearly \$30 million of the working capital reserve was used to meet current expenses. As a result in January 1984, the Board imposed an emergency mid-year water rate increase of 37 percent to raise needed revenue and restore depleted reserves.

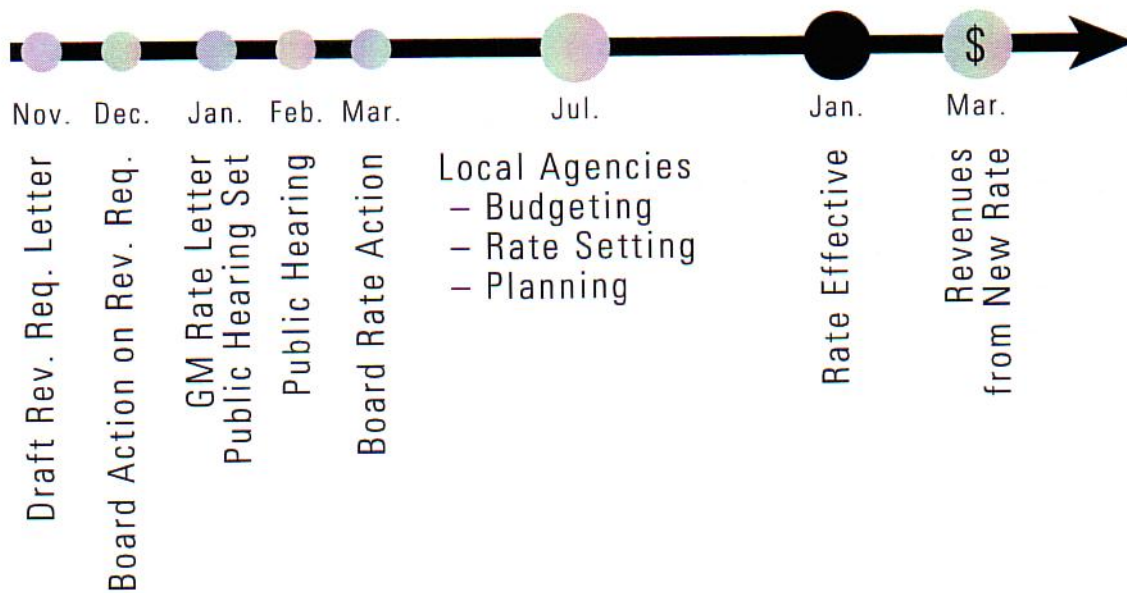
The relationship between continued reliance on variable commodity revenues and increasing levels of fixed costs along with the desire to provide financial security and rate stability without unduly burdening the Member Agencies has again prompted a review of Metropolitan's reserve policy. A review of the current reserve policy was conducted by staff and the Member Agency Finance Work Group (FWG) and an alternative method for determining appropriate reserve levels was developed. The alternative method establishes a process by which the Board makes an annual determination of a minimum and maximum reserve level that reflect current financial conditions and mitigate appropriate future risks.

Rate Stability The stability and predictability of Metropolitan's rates are very important to the region for a number of reasons. Largely due to the fact that Metropolitan has come to supply over 50 percent of the water used in the region, Metropolitan's water rates are often used as a benchmark against which investments in local resources are evaluated and the terms and conditions of transactions between agencies concerning local resources are determined. It has therefore become increasingly important for Metropolitan to consider the impact of rate changes not only in terms of the cost of imported water service, but also in terms of the impacts on local water resources planning and investments. Holding reserves sufficient to protect the water rate from changes caused by weather and other unexpected factors facilitates the resource planning and investment efforts made by local agencies by providing a stable and predictable water rate.

In order to provide local agencies with plenty of time to incorporate any changes in Metropolitan's rates into their own financial planning, budgeting and rate setting processes, Metropolitan determines its water rates well in advance of when the new

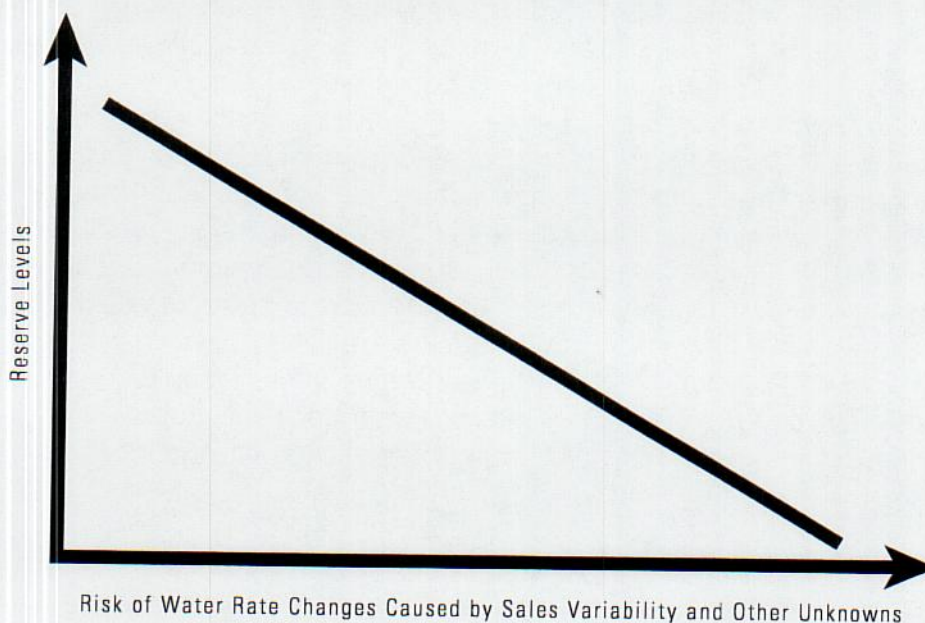
rates actually take effect. Figure 1 illustrates how Metropolitan's rate setting process begins in October when a draft determination of the revenue requirement is prepared for the Board's review. The Board takes action on the revenue requirement in December and receives a letter from the General Manager in January recommending the rates and charges for the year. After a public hearing in February, the Board either approves or modifies the General Manager's recommendation and adopts the rates and charges in March. After the Board's action in March, local agencies have about three months to prepare their budgets and rates (most local agencies operate under a July - June fiscal year), and an additional 6 months before the Metropolitan rates go into effect on January 1. However, because there is a two month billing cycle after an agency receives a delivery from Metropolitan, does not receive any increase in revenue from a rate change until March. Therefore, from the time Metropolitan's rate setting process begins in October until additional revenues are received from a rate change 18 months have elapsed. If properly designed, the reserve system can provide Metropolitan with enough flexibility to absorb any changes in revenues or costs that may occur during this period and not pass this uncertainty on to the local agencies.

FIGURE 1.
MWD RATE SETTING PROCESS



Underlying all of the above discussion about the importance of rate stability is a general relationship between reserve levels and the risk that the water rate will change due to weather conditions or some other unexpected factors. This relationship is illustrated in Figure 2, which shows that as reserve levels decrease the risk that the water rate will be influenced by weather or some other unexpected factors increases.

FIGURE 2.
TRADEOFF BETWEEN RESERVE LEVELS AND
RISK OF CHANGES TO WATER RATE



The remaining discussion of reserve policies in this Chapter centers around this concept. From a policy perspective, the challenge is in determining the degree to which Metropolitan's reserve system should protect the water rate from unexpected and unplanned changes.

Current Rate Stabilization Reserves Currently, Metropolitan reserves up to \$350 million for the purpose of mitigating the need for water rate increases caused by periods of low sales revenue and other unexpected factors. These reserves are Metropolitan's working capital and the Water Rate Stabilization Fund (WRSF).

As described above, Working Capital is held in the Revenue Remainder and General Funds. Based on previous experience which has shown that a one year sales shortfall of up to 25 percent has occurred, the "Working Capital Requirement" is currently at a level of \$150 million. In addition to the working capital, up to \$200 million may be held in the WRSF to mitigate future rate increases by drawing on those funds to balance the annual budget in lieu of increasing current revenues.

If low sales or other factors completely deplete the WRSF, working capital would be used to meet expenses and the Board would need to make a decision regarding replenishment of reserve levels. In effect, the current policy uses working capital as a minimum reserve level and the \$200 million cap in the WRSF acts as a maximum reserve level. If the WRSF is at the \$200 million maximum balance, unused revenue flows into the PAYG Fund to meet the Board's policy of funding 20 percent of the CIP on a pay-as-you-go basis.

The Revenue Design Study Report conducted by Black and Veatch in 1992 recommended the current level of working capital. Most recently, as part of the 1995 update to the Long-Range Finance Plan, your Board acted to limit the total reserves in the WRSF to \$200 million. The following sections present an alternative method for determining minimum and maximum reserve levels developed by Staff and reviewed by the MWD/Member Agency Finance Work Group. A discussion of the use of debt financing to meet operating costs in lieu of reserves when operating revenues are insufficient is also included. In addition, after extensive discussions with the Finance Work Group, the concept of "working cash" has been proposed which, together with the minimum/maximum concept, could replace the current working capital policy. The working cash proposal is discussed later in this chapter.

◆ ALTERNATIVE RESERVE POLICIES

Method Reviewed by Finance Workgroup The alternative methodology for determining an appropriate level of reserves that was reviewed by the Finance Work Group (FWG) also establishes a minimum reserve level and maximum reserve level. But, this alternative procedure relies on the Board to set the minimum reserve level and maximum reserve level to reflect changing financial conditions and assessments of future risks, rather than relying on static minimum and maximum reserve levels established at different points in time.

For the alternative methodology, minimum and maximum reserve levels are defined by parameters that indicate the risk of low water sales and/or other risk factors, given the most recent information.

Minimum Reserve Level at the end of each fiscal year the minimum reserve level would be determined as the difference between the expected water rate revenue requirement and the potential for low water sales revenue for the following 18 months. This amount would be adjusted for estimated reductions in variable power costs and offsetting reductions in interest income.

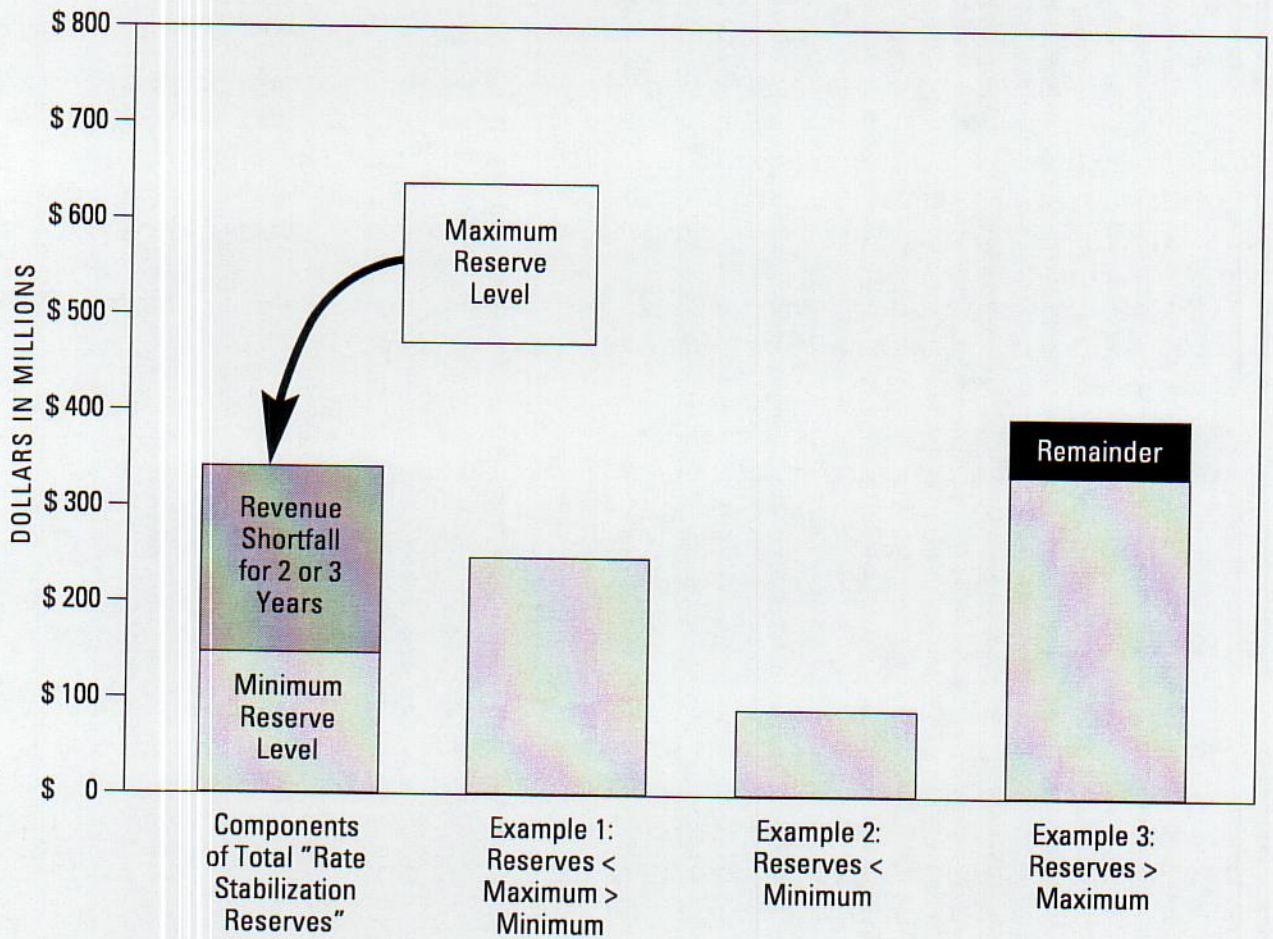
Maximum Reserve Level at the end of each fiscal year the difference between the expected water rate revenue requirement and low water sales revenues for the three or fewer years following the budget year would be estimated and added to the minimum reserve level. This amount would be adjusted for reductions in variable power costs and offsetting reductions in interest income, and as appropriately determined by the Board, other risk factors.

Figure 3 provides an example of how these parameters would help the Board determine an appropriate course of action given different situations that may occur in any given year.

It is assumed in Figure 3 that the Board determines that about \$307 million is an appropriate maximum reserve level as of June 30, 1999 to insure against water rate increases caused by reductions in revenues due to wet weather and that other risk factors should not be reserved for. The minimum reserve level is determined to be approximately \$130 million as of June 30, 1999. In Example 1, the reserves are greater than the minimum level and less than the maximum reserve level indicating that the

reserves are within an acceptable range and the reserve system is therefore effectively in balance. In Example 2, however, the reserves have fallen below the minimum level either due to an extended period of low sales or other factors and the Board, based on staff recommendations, must decide whether or not the minimum reserve level needs to be replenished or if some other action is appropriate. Finally, in Example 3, reserves are greater than the maximum level, thereby providing the Board with a decision point to determine how best to use the remainder that is over and above the maximum reserve level.

**FIGURE 3.
MINIMUM AND MAXIMUM RESERVE LEVEL
AND RESERVE FUND BALANCES**



◆ PARAMETERS FOR THE REVENUE SHORTFALL RESERVES

As discussed above, as an alternative to the current working capital policy, a minimum revenue shortfall reserve level would be established to cover reasonably expected revenue shortfalls over an 18-month period. These funds would be held in the Revenue Remainder Fund. A maximum revenue shortfall reserve level would be established based on a 2 or 3 year water sales shortfall and held in the Water Rate Stabilization Fund and the Revenue Remainder Fund. The Board will make the determination of whether the 2 or the 3 year level of the maximum reserve is more appropriate. The minimum and maximum levels would serve as triggers for Board consideration of options when reserve levels fall below the minimum or exceed the maximum.

If the revenue shortfall reserves fall below the minimum, the Board consideration should include, at a minimum, the following options:

- ◆ Reduce capital costs and/or operating costs (including PAYG).
- ◆ Hold reserves at the reduced level and rely on future revenues.
- ◆ Issue debt to cover fixed cost obligations.
- ◆ Raise water rates.

If the revenue shortfall reserves exceed the maximum the Board should consider the following options:

- ◆ Use the funds in lieu of additional debt or to retire outstanding debt to reduce future water revenue requirements thereby providing a long term benefit to the member agencies.
- ◆ Reduce water rates.
- ◆ Offset or reduce Readiness-to-Serve charges.
- ◆ Hold the funds in the WRSF for unexpected needs.
- ◆ Refund money to the member agencies.
- ◆ Use the remaining funds for any other lawful purpose of the District.

Defining the Maximum Reserve Level Because the reserve system exists to insure the water rate against unforeseen rate increases, the maximum reserve level should reflect the risk of unexpected water rate increases and the degree to which the Board wants to protect the water rate from these risks. Low sales revenue caused by wet weather is the principal factor that could cause unexpected increases in the water rate and is therefore used to help define the maximum reserve level. Due to investments in storage programs, water transfers, and after the Eastside Reservoir Project is completed and filled, it is more likely that (at least for the next ten years) Metropolitan will have sufficient supplies under drought conditions and the financial impact of drought shortages is therefore considered to be less of a risk.

Periods of Low Sales Revenue Caused by Wet Weather Because Metropolitan is the supplemental wholesale supplier for its member agencies, large decreases in Metropolitan's water sales occur when wet weather decreases retail demands and increases local supplies through the natural replenishment of local groundwater basins, surface reservoirs, and higher Los Angeles Aqueduct deliveries. Chapter 3 provides a detailed discussion of the factors that affect Metropolitan's water sales.

The alternative reserve policy defines the risk of periods of low sales revenue differently from current policy in three important ways. First, the magnitude of the potential annual decrease in demands has been reduced from 500,000 acre-feet to the difference between expected normal weather demands and low demands estimated at the 95 percent exceedance level. Over the next five years this difference is expected to be about 320,000 acre-feet per year or about 16 percent of total normal demands. Establishing a lower bound on expected sales at the 95 percent exceedance level acknowledges that even during an extremely wet year there is a base level of water sales revenue available to MWD of about \$500 to \$550 million. It is important to note that this base level water sales revenue only accounts for the effects of weather and assumes that any wheeling through Metropolitan's system generates revenue similar to what would be generated by the water rate and/or provides significant benefits in the form of offsetting reductions in Metropolitan's revenue requirement.

Adjustments made to account for lower variable power costs and lower interest income make up the second important difference from the current methodology. When sales decrease, Metropolitan's variable power costs for pumping on the State Water Project and the Colorado River Aqueduct also decrease. An estimate of these avoided variable power costs is therefore used to reduce the maximum reserve level. However, the maximum reserve level is also adjusted upward to account for decreases in interest income that will occur as reserves are used over time to meet expenditures.

Third, because historical rainfall data indicates that wet years are more likely to occur within at least one year of each other or even consecutively, the alternative methodology extends the duration of a low sales period from 1 year to a range of 2 to 3 years. Two to three years was determined to be a reasonable range for the duration of a wet period by examining 118 years of Los Angeles Civic Center rainfall data (1879 to 1996). The rainfall data was analyzed to determine the probability that 2 and 3 wet years would occur within a three year period. Los Angeles Civic Center rainfall data was used for a proxy measure of regional weather because it is strongly correlated with rainfall data from other parts of the service area and Eastern Sierra snowpack, an indicator of Los Angeles Aqueduct deliveries. The rainfall data indicated that the probability of two out of three years being wet is 23 percent. The probability that 3 years in a row will be wet is 2 percent. These probabilities are only intended to indicate the past frequency of two out of three years being wet and three out of three years being wet. The actual probability that a particular event will occur and have certain impacts on reserve levels is dependent upon many factors, including not only hydrologic conditions in the current year but also conditions in the previous year(s) and may differ substantially from the probabilities given above. Sensitivity analysis conducted to try to estimate the probability of reserves declining below the minimum reserve level is presented later in this chapter.

Table 2 provides an example of how the Maximum Reserve Level for Fiscal Year 1998-99 would be calculated for a two or three year wet period under the Alternative Method reviewed by the FWG. For example, the Maximum Reserve Level for a two year wet period is the sum of the Minimum Reserve Level for Fiscal Year 1999-00 and the adjusted annual revenue shortfall for Fiscal Years 2000-01 and 2001-02.

TABLE 2.
ALTERNATIVE MAXIMUM RESERVE LEVEL(S) FISCAL YEAR 1998-99
(\$ IN MILLIONS)

Fiscal Year Ending	Water Rate Revenue Requirement Under Normal Weather	Water Rate Revenue at the 95% Exceedance Sales Level	Annual Revenue Shortfall	Estimated Reduction in Power Costs due to Lower Sales	Estimated Reduction in Interest Income	Adjusted Annual Revenue Shortfall	Minimum Reserve Level
	A	B	C=(A-B)	D	E	F=(C-D+E)	G=F* 1.5
1999							127
2000	587	491	96	17	5	84	121
2001	604	515	89	19	11	81	153
2002	631	524	107	20	15	102	195
2003	670	537	133	21	18	130	

Fiscal Year Ending 1998-99 Maximum Reserve Balance for a 2 Year Wet Period: \$310
 Fiscal Year Ending 1998-99 Maximum Reserve Balance for a 3 Year Wet Period: \$440

*F of the following year.

To determine the appropriate maximum level of reserves to insure the water rate against periods of low sales revenue caused by wet weather, the duration (in years) and probability of the period of low sales are the most important variables for the Board to consider. A longer duration (e.g. choosing to reserve for a three year wet period versus a two year wet period) is more likely to insure the water rate against any increases caused by wet weather but will result in a higher maximum reserve level. A shorter duration is more likely to lead to rate increases caused by an extended wet period but will result in a lower maximum reserve level. It is important to note that Metropolitan actually used \$380 million from the Rate Stabilization Fund in the 3-year period from 1990-91 to 1992-93. Sensitivity analysis that tests the Maximum Reserve Levels estimated in Table 2 are presented later in this section along with estimated probabilities that reserves will fall below the minimum level. Although the MWD/Member Agency Finance Work Group did not agree on a single definition for the duration of a period of low sales, it was generally agreed that the duration of a period of low sales should be defined as being either 2 or 3 years, with the Board to determine the appropriate duration.

Other Risk Factors In addition to reductions in revenues caused by weather, there are several other factors (e.g. slower growth in sales, higher capital costs, etc.), that may unexpectedly affect the water rate and should therefore be considered in the review of Metropolitan's reserves. The potential impact of other risk factors is more difficult to quantify than the risk of revenue shortfalls due to weather because of the uncertainty surrounding the magnitude and timing of cost and revenue impacts and the unknown

probability that one or more of the factors will occur. To provide an indication of the other risks facing Metropolitan the following examples are provided as general rules of thumb that are helpful in understanding potential other risks.

- ◆ If regional economic growth is slower than current estimates, reducing projected sales by 50,000 acre-feet per year, annual water rate revenues could be about \$18 million lower per year. The effect of economic growth on sales must be considered separately from the effects of weather.
- ◆ For every \$100 million that debt financed capital costs exceed current estimates, annual debt service costs could be about \$6 to \$7 million more per year. The uncertainty surrounding future capital costs is due to the potential for system replacement costs beyond those currently anticipated for both the MWD and SWP systems.
- ◆ Although the original IRP estimate has been included in the current financial forecast, Metropolitan's cost for the Bay-Delta solution is unknown at this time. Total cost estimates for the three proposed alternatives range from \$4 billion to \$12 billion depending upon the selected alternative.
- ◆ The cost of the California Plan, designed to ensure that California lives within its entitlement of 4.4 million acre-feet of Colorado River Water, while also providing a full Colorado River Aqueduct, are also largely unknown at this time. Issues surrounding elements of the California Plan such as the proposed SDCWA/IID transfer, Off-Stream Storage costs and other Colorado River Programs are examples of Metropolitan's supply cost uncertainty.
- ◆ Salinity management issues could raise operating and capital costs.
- ◆ For every \$10 per acre-foot that electric industry restructuring increases or decreases Metropolitan's average unit power cost, annual costs could increase or decrease by \$18 to \$22 million.
- ◆ Increasing public concern over water quality issues may impact Metropolitan's cost for providing treated water service sooner than anticipated.

Although reserves can help mitigate rate increases caused by the above factors, it is not always possible, or in the best interests of the member agencies, to fund reserves in anticipation of major long-term changes in Metropolitan's cost or revenue structure. To account for the above risk factors in the Maximum Reserve Level the Board must decide if it is appropriate to hold reserves to mitigate water rate increases caused by these factors. **It should be recognized that many of the other risk factors listed may allow adequate lead time for the Board to consider water rate increases or other mitigating actions.** In addition, the majority of the above risk factors would constitute a long-term change in Metropolitan's cost or revenue structure and could not be indefinitely reserved against.

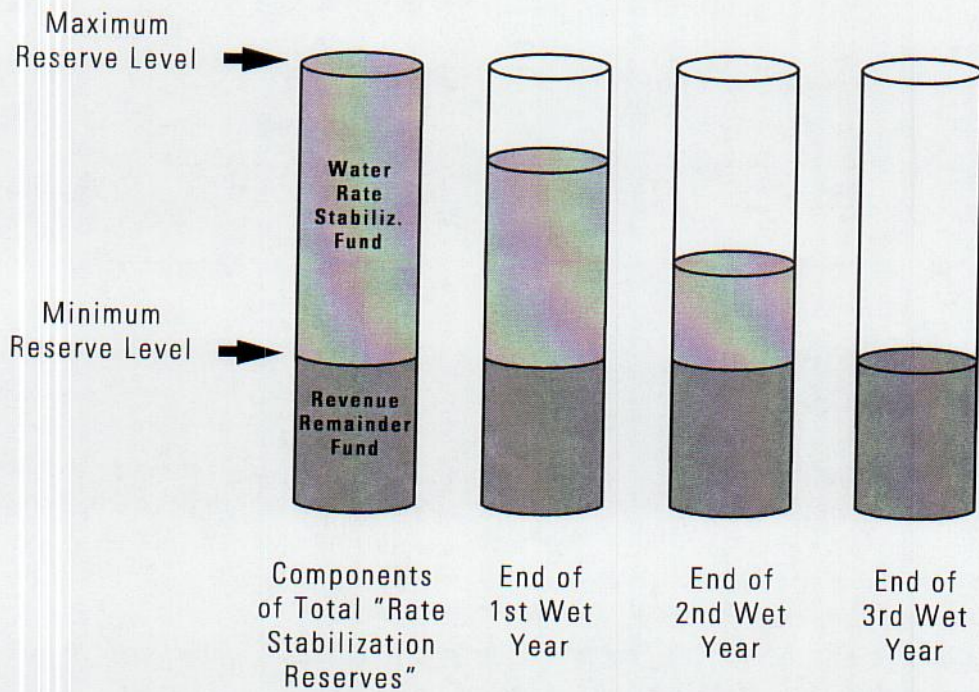
The Minimum Reserve Level If the Board determines that a water rate increase or cost decrease is required to replenish reserves, a minimum reserve level provides time for such actions to be considered, implemented and to take effect. Similar to the current reserve policy, the Minimum Reserve Level for the alternative methodology would be held in the Revenue Remainder Fund. At the end of each Fiscal Year, the Minimum Reserve Level would be calculated as the potential annual revenue shortfall for the following year and would be adjusted to account for estimated changes in variable power costs and interest income. This estimated annual amount would be increased by 50 percent, effectively allowing 18 months for Board action to replenish reserves to take effect. The first line of Table 2 summarizes how the estimated Minimum Reserve Level for Fiscal Year 1998-99 would be calculated.

The Relationship Between the Maximum and Minimum Reserve Levels For a wet period defined by the Board to not require Board action (i.e. no rate increase or operating cost decrease), the Maximum Reserve Level includes sufficient reserves to fund any shortfall in operating revenues for the duration of the wet period plus the Minimum Reserve Level. In other words, a Maximum Reserve Level designed to insure the water rate against a wet period lasting three years will fund the Minimum Reserve Level for three years and meet the Minimum Reserve Level at the beginning of the fourth year. A Maximum Reserve Level designed to insure the water rate against a wet period lasting two years will fund the Minimum Reserve Level for two years and meet the Minimum Reserve Level at the beginning of the third year.

Figure 4 illustrates the use of reserves over a three year wet period. At the end of the first wet year, low water sales revenue results in a transfer from the WRSF to the Revenue Remainder Fund in order to meet the Minimum Reserve Level. At the end of the second wet year the transfer is repeated, further decreasing the balance of the WRSF. By the end of the third wet year all of the WRSF has been used to meet the Minimum Reserve Level three times. Although the Board may elect to take action prior to the end of the third wet year, no action is required until the end of the third year because sufficient reserves were held in the initial Maximum Reserve Level to fund the Minimum Reserve Level for the beginning of the fourth year. However, this risks depletion of the minimum reserve level prior to receipt of new revenues from a rate increase.



FIGURE 4.
USE OF RATE STABILIZATION RESERVES



Sensitivity Analysis Sensitivity analysis was conducted to test the Maximum Reserve Levels calculated in Table 2. First, the most recent water rate forecast, generated using expected normal demands, was held constant and ending year reserve balances were calculated for two and three year wet periods beginning in 2000. A lower initial reserve level of \$200 million was also tested to illustrate how rapidly reserves can be drawn down below the minimum level by an extended wet period. The results of the analysis indicate that the \$310 million Maximum Reserve Level is sufficient to fund the Minimum Reserve Level for a two year wet period, the \$440 million Maximum Reserve Level is sufficient to fund the Minimum Reserve Level for a three year wet period, and an initial reserve level of \$200 million could require a water rate increase or cost decreases as soon as next year if sales were low.

Figure 5 illustrates that if two wet years were to occur beginning in 2000, an initial reserve level of \$200 million could result in reserves falling below the Minimum Reserve Level as early as Fiscal Year 1999-00. However, a Maximum Reserve Level of \$310 million is sufficient to ensure that reserves do not fall below the Minimum Reserve Level for the duration of the two year wet period. The higher Maximum Reserve Level of \$440 million, estimated for a three year wet period, adequately ensures that the reserves do not fall below the Minimum Reserve Level for the duration of the two year wet period.

FIGURE 5.
ANNUAL RESERVE BALANCES FOR A TWO YEAR WET PERIOD

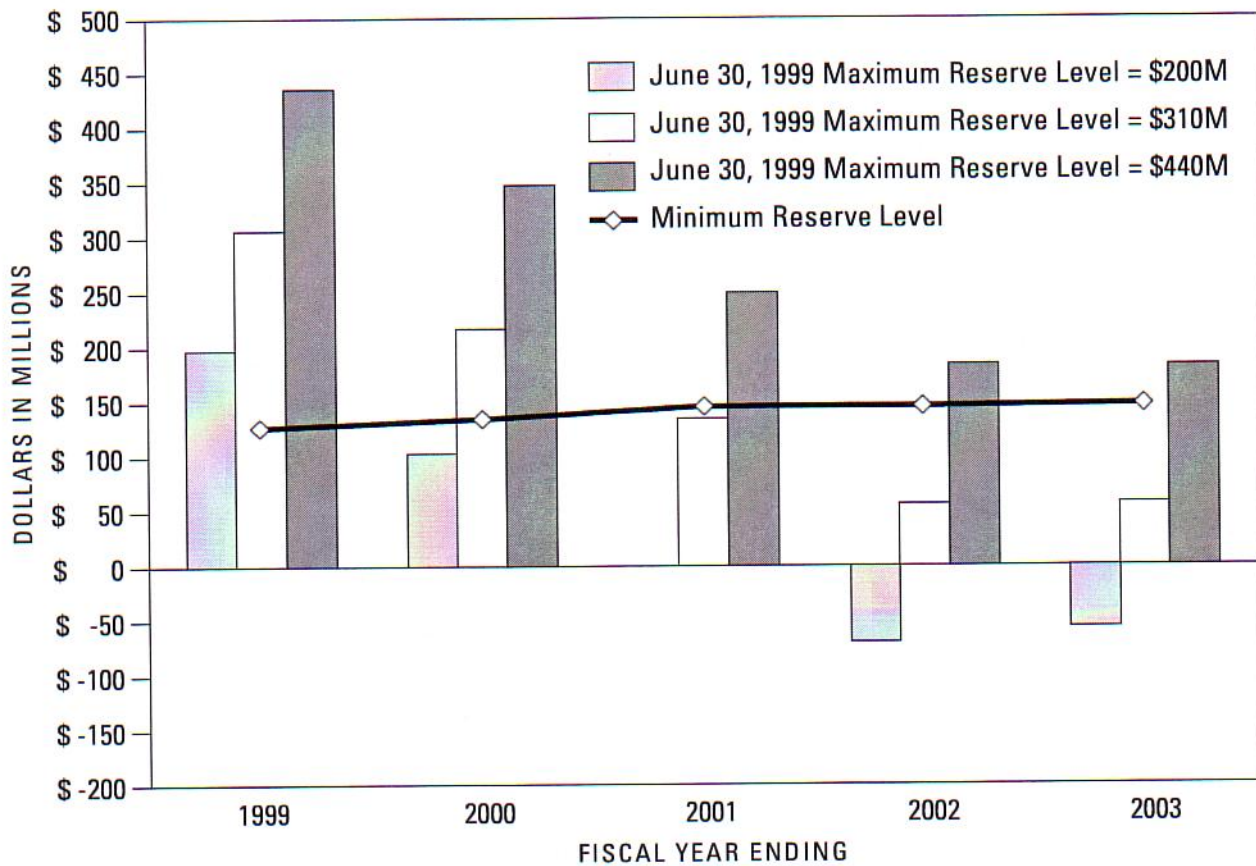
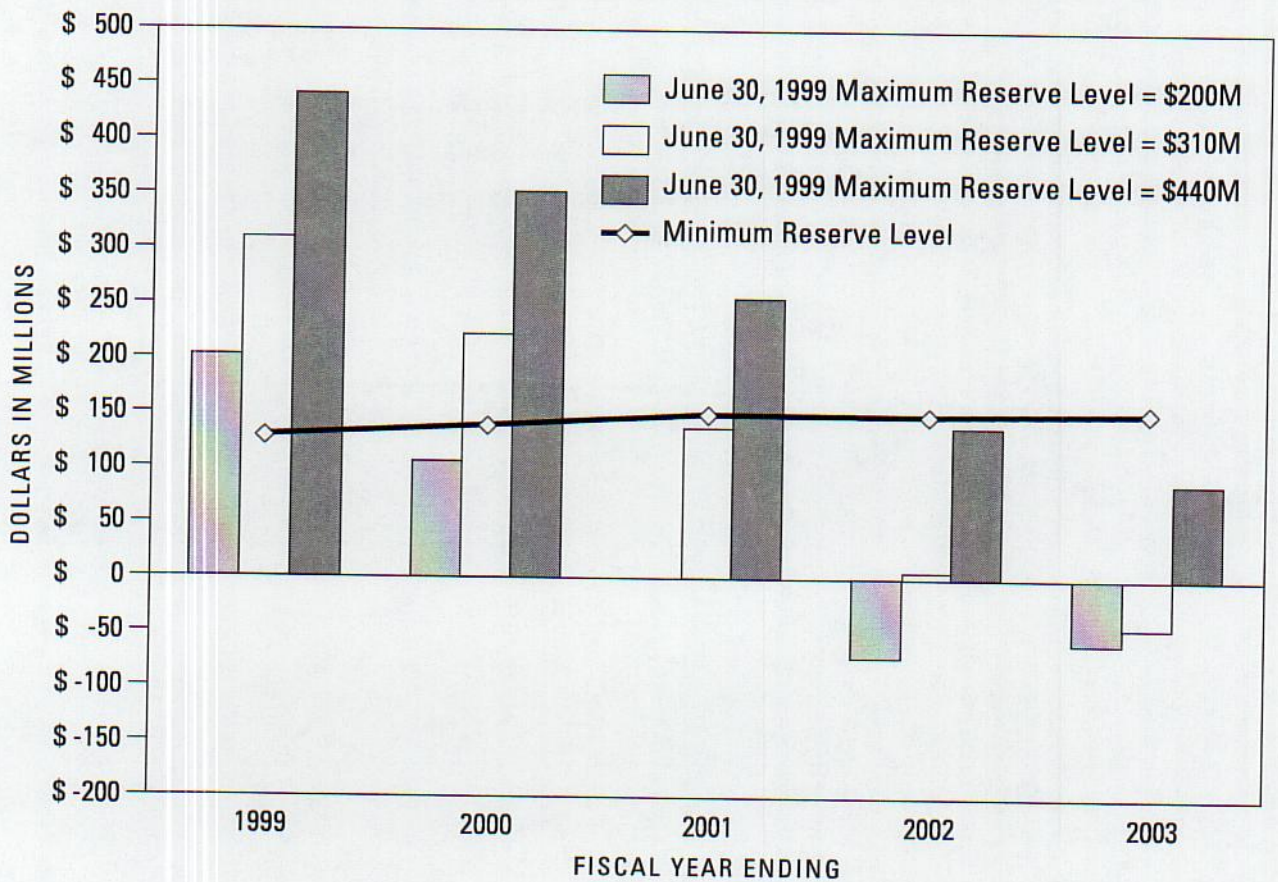


Figure 6 illustrates the effect of extending the duration of the wet period from two to three years. The result for all three initial reserve levels is identical to that shown in Figure 5 through Fiscal Year 2000-01. Although historic rainfall data indicates that the chance of a third consecutive wet year is relatively small (2 percent or less), if year 2002 were also wet, or if sales in previous years were lower than the levels used to define the maximum reserve levels from Table 2, reserves could fall below the minimum level if the reserve policy is based on a two year wet period. A Maximum Reserve Level of \$440 million ensures that the reserves do not decrease below the Minimum Level for the duration of a three year wet period.

FIGURE 6.
ANNUAL RESERVE BALANCES FOR A THREE YEAR WET PERIOD



The second step in the sensitivity analysis estimated rate increases required to fund the Minimum Reserve Level in years when the reserves fell below the minimum. Table 3 shows the change in the water rate by year 2003 that could result from a two or three year wet period and different Maximum Reserve Levels. For an extreme example, combining an initial reserve level of \$200 million with 3 consecutive wet years beginning in 2000, could increase the water rate by \$61 dollars per acre-foot. However, an initial

Maximum Reserve Level of \$440 million fully protects the water rate from a three year wet period and no water rate increase is necessary. Additionally, an initial Maximum Reserve Level of \$310 million adequately protects the water rate from increases caused by a two year wet period, but, if a three year wet period were to occur, a \$64 dollar per acre-foot increase in the water rate may be necessary to meet the Minimum Reserve Level.

TABLE 3.
INCREASE IN WATER RATE BY YEAR 2002
REQUIRED TO MAINTAIN MINIMUM RESERVE LEVEL

June 30, 1998 Maximum Reserve Level (\$ Millions)	Duration of Wet Period (Beginning 1999)	
	2 Years	3 Years
\$200M	\$31	\$61
\$310M	\$ 0	\$64
\$440M	\$ 0	\$ 0

Probability Analysis of Alternative Reserve Policy The alternative reserve methodology developed by staff and reviewed by the Finance Workgroup was further tested by generating projected reserve balances in each future year under 70 different hydrologic conditions (1922-1998). By counting the number of times that the reserve balances are estimated to fall below the minimum reserve level it is possible to calculate the probability that reserves will be below the minimum balance in any future year.

Table 4 summarizes the probability that reserves will fall below the minimum reserve level in the future. For example, if an initial maximum reserve level of \$310 million (2 year wet period) is chosen by the Board, there is a 14.3 percent chance that reserves will fall below the minimum level by the end of Fiscal Year 2001-02. If the higher initial reserve balance of \$440 million (3 year wet period) were selected by the Board, there is a 1.4 percent chance that reserves will decrease below minimum levels by the end of Fiscal Year 2001-02.

It is interesting to note that the higher probabilities shown in the later years result from the conditional effects of wet years occurring in previous years. In other words, as the forecast is extended there is a greater chance that reserve balances in the later years will be adversely impacted by events in previous years. This conditional dependence is an important factor to consider when evaluating appropriate reserve levels. For example, if the Board chooses to reserve for a 2 year wet period, the probability of reserves falling below the minimum reserve level increases from 14.3 percent in Fiscal Year Ending 2002 to 20.0 percent in Fiscal Year Ending 2003 because adding one year again captures 70 different weather conditions, some of which are wet.

TABLE 4.
ESTIMATED PROBABILITY OF RESERVES
FALLING BELOW MINIMUM LEVEL

	Minimum Reserve Level	2 Year Wet Period Reserve	3 Year Wet Period Reserve
	Dollars in Millions		
Fiscal Year Ending			
1999	\$127	0.0%	0.0%
2000	\$121	0.0%	0.0%
2001	\$153	2.9%	0.0%
2002	\$195	14.3%	1.4%
2003	\$191	20.0%	4.3%

(1) The probability of reserves falling below the minimum level is estimated from 70 different outcomes based on 1922-1991 hydrologic conditions. Each future years outcome is dependent on the simulated conditions in the prior year(s).

Simplified Formula for Determining Reserve Levels Although technically rigorous, the alternative formula (see Table 2) for determining reserve levels is not as easily calculated or explained as other methods which may serve to adequately define appropriate reserve levels. The ability for anyone interested in Metropolitan's reserves to simply calculate and understand the reasoning behind an appropriate reserve level is a significant advantage of a simpler formula. Some water agencies simply set their reserve levels based on a percentage of fixed costs recovered by variable commodity rates. The percentage of fixed costs is most often associated with the expected level of variability in sales and can be adjusted for other factors such as time lags associated with budgeting and rate setting cycles, reasonable expectations of periods of potential revenue shortfalls, and other adjustments.

The following example in Table 5 applies a simple formula to arrive at maximum reserve levels that are not unlike the maximum reserve levels derived from the more technical formula used in Table 2. Although the previous chapter stated that the expected variability in Metropolitan's sales could be as much as ± 20 percent, the technical method reviewed by the Finance Workgroup assumed sales would vary annually by about 16 percent and included adjustments for changes in variable power costs and lost interest income. For the purposes of developing a simple formula for defining maximum reserve levels, a sales variability level of 17.5 percent was chosen to express the amount of fixed costs recovered by the water rate that should be included in the reserves. This percentage generates maximum reserve levels consistent with the technical method reviewed by the Finance Workgroup and supported by the analysis presented earlier in this chapter.

TABLE 5.
SIMPLIFIED APPROACH FOR DETERMINING RESERVE LEVELS

Dollars in Millions	Fiscal Year Ending 1999	1999-00	2000-01	2001-02	2002-03
Total Normal Water Rate					
Revenue Requirement		\$595	\$631	\$670	\$663
less Variable Costs		(105)	(113)	(109)	(105)
Fixed Costs Recovered by Water Rate		\$490	\$517	\$562	\$558
Percent Reserved		17.5%	17.5%	17.5%	17.5%
Reserved Amount		\$ 86	\$ 91	\$ 98	\$98
Fiscal Year Ending 1998-99					
Reserve Components					
Minimum Reserve Level (18 months)	\$129				
Maximum Reserve Level for 2 Wet Years	\$318				
Maximum Reserve Level for 3 Wet Years	\$415				

Using this simplified approach, the maximum reserve level can be simply defined at the end of each Fiscal Year as 17.5 percent of the fixed costs recovered by the water rates for the first 18 months immediately following the most recent fiscal year plus an additional 2 or 3 years.

Debt Financing Operating Revenue Shortfalls One alternative to holding cash reserves to mitigate unexpected revenue shortfalls would be to secure a line of credit (LOC) as a substitute for some amount of the rate stabilization reserves. Substituting a LOC for reserves would, however, impact Metropolitan's water rate, and debt capacity, and therefore its ability to finance capital, and possibly its long-term financial integrity.

In general, Metropolitan's Financial Advisor has identified the costs associated with substituting a LOC for each \$100 million in reserves as \$6.125 million per year. This estimate is made up of two components: (1) \$6 million for the lost interest income earned on \$100 million at 6 percent per year and (2) \$0.125 for annual LOC fees. At current sales levels this cost translates into almost a \$4 per acre-foot increase in the water rate. This cost does not include the interest cost (at commercial financing rates rather than tax-exempt rates) which would become payable on the principle amount of any drawdown.

Metropolitan's Financial Advisor has cautioned that the annual LOC fees are related to the District's liquidity and may increase as reserves decrease. Further, the Financial Advisor has cautioned that a policy of using a LOC to fund operating revenue shortfalls may impact Metropolitan's credit rating and further increase LOC annual fees.

This type of an arrangement would result in Metropolitan's rate payers paying interest and annual fees for the LOC versus earning interest (which helps reduce the water rate) on the reserves. To the extent that Metropolitan's reserves earn a return comparable to the interest on investments earned by the Member Agencies, the financial advantages of

substituting a LOC for a portion of Metropolitan's reserves are limited and are likely outweighed by the potential negative implications of such a policy over the long-term.

◆ **WORKING CASH**

The MWD/Member Agency Finance Work Group determined that Metropolitan's current definition of working capital was possibly inconsistent with established industry norms. The concept of working cash was developed as an alternative. The O&M Fund was identified as Metropolitan's true working cash. The O&M Fund, required under revenue bond covenants, holds funds to cover two months of O&M expenditures and is used to handle timing mismatches between receipt of revenues and payments of expenses. The working cash would work together with the minimum reserve level to ensure that Metropolitan can cover fixed costs during periods of short-term revenue shortfalls.

◆ **SELF-INSURED RETENTION**

Metropolitan currently maintains a self-insured retention reserve of \$25 million for emergency repairs and claims. The monies are held in the Revenue Remainder Fund and have been considered part of the working capital. The MWD/Member Agency Work Group, as part of the redefining of working capital, recommended that the self-insured retention should be held in a separate fund and clearly identified as a reserve for this purpose.

◆ **WATER TRANSFER FUND**

The Water Transfer Fund is maintained to purchase water for storage programs, to purchase options for future water purchases, and to fund the filling of the Eastside Reservoir Project. The fund is currently scheduled to sunset in the year 2004. The Work Group with the exception of the San Diego County Water Authority, is in agreement with the purpose and management of the fund but feels that it needs to be re-evaluated after the Eastside Reservoir Project becomes operational.

◆ **FLOW OF FUNDS**

Metropolitan's current flow of funds ends with the Pay-As-You-Go Fund into which remaining monies on hand at year-end are placed after all other reserve requirements are satisfied. The Water Rate Stabilization Fund (WRSF) has been capped at \$200 million with monies above this level flowing to the PAYG Fund. An alternative flow of funds has been suggested by the MWD/Member Agency Finance Work Group. The alternative would remove the cap from the WRSF and make this fund the last in the flow of funds, after the required balance in the PAYG Fund has been met.

In addition it was recommended that the year-end PAYG Fund requirement be revised. Current Board policy calls for the June 30 PAYG Fund balance to be equal to the amount budgeted for the following year's PAYG expenditures. It was noted that this level tends to be higher than needed to fund the PAYG program since revenues are raised during the year for PAYG purposes. The proposed revision is to set the June 30 PAYG Fund balance requirement at 1/2 of the amount budgeted for PAYG expenditures in the following year.

Attachment 4

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
Ten-Year Summary of Reserve Minimum, Target and Actual Reserves and
Average Rate Increases
Fiscal Years 2004 through 2013

(Dollars in Millions)

<u>Fiscal Year Ending June 30¹</u>	<u>Minimum</u>	<u>Target</u>	<u>Reserves²</u>	<u>Average Rate Increase</u>
2004	\$159	\$377	\$365	2.0%
2005	153	383	339	4.4
2006	159	390	258	1.6
2007	167	411	290	3.4
2008	209	479	285	5.8
2009	216	535	323	14.3
2010	218	542	285	19.7
2011	191	483	236	7.5
2012	191	458	281	7.5
2013	198	474	536	5.0

¹ Fiscal years 2004 through 2012, on cash basis accounting. Fiscal year 2013, on a modified accrual basis of accounting.

² Combined balances in Water Revenue Remainder and Water Rate Stabilization Funds.



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

November 20, 2014

Director Michael T. Hogan
Director Keith Lewinger
Director Fern Steiner
Director Yen C. Tu
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated November 17, 2014 regarding Board Letter 8-2

This letter addresses your comments dated November 17, 2014 on Draft Appendix A to the Official Statement for (1) Metropolitan's Waterworks General Obligation Refunding Bonds, 2014 Series A; and (2) the Remarketing Statements for Metropolitan's Water Revenue Refunding Bonds (Index Mode), 2011 Series A-1 and A-3, and 2009 Series A-2, attached to Board Letter 8-2. Your general comments are addressed below, followed by your specific comments and Metropolitan's responses.

Appendix A provides material financial and operating information about Metropolitan to potential investors. Appendix A is prepared by Metropolitan staff. Bond counsel does not serve as disclosure counsel and will not be responding to your letter. Metropolitan's objective is to provide accurate disclosure regarding the bonds being offered and their security and source of payment to potential investors, not to promote Metropolitan's position in any litigation. Appendix A is updated for each bond offering to provide current information. Forward-looking statements or projections are based on current information such as the facts and assumptions contained within the biennial budget and ten-year financial forecast.

The ***General Comments*** in your letter show continuing, purposeful misstatements about Metropolitan's current financial planning documents and a general lack of recognition of Metropolitan's Board-adopted policies. The biennial budget and ten-year financial forecast adopted in April 2014 comprise Metropolitan's long-range finance plan and replace the financial forecast in the previous long-range finance plan adopted by the Board in 2004. Incorporating a

ten-year financial forecast within the biennial budget helps ensure that the long-range financial plan will be updated every two years.

Water rates and charges are set by the Board using projected costs of service for the budget period and normal sales assumptions to produce stable, predictable rates. Projected costs of service – how much money Metropolitan needs to deliver supplemental supplies to its member agencies – are presented and scrutinized in public board and committee meetings and workshops over a three-month budget process. All revenues generated from Metropolitan’s rates and charges are used to pay the costs incurred by Metropolitan to fulfill its purpose of acquiring, developing, storing, transporting, and delivering water at wholesale to its member agencies. For the past three years, sales have exceeded projections, primarily due to exceptionally dry weather, a rebounding economy and other factors. In April 2014, the Board approved the use of reserves over target to reduce future obligations, keep future rate increases reasonable and provide funding for drought response programs, in accordance with Metropolitan’s policy that requires Board direction for use of these funds. As you know, in prior years when sales did not meet budget projections, Metropolitan drew down reserves to meet costs as required.

You have also generally commented that Metropolitan is providing transportation service to SDCWA separately from water sales. Metropolitan is not. The Exchange Agreement between Metropolitan and SDCWA is a contract that reflects water supplies made available to Metropolitan and SDCWA. SDCWA has no wheeling arrangement with Metropolitan.

Comments on Draft Appendix A dated November 6, 2014

The following specific SDCWA comments and Metropolitan’s responses refer to the draft of Appendix A dated November 6, 2014, showing changes from the draft dated April 30, 2014.

A-4: Drought Response Actions. The discussion in this section of the Official Statement is insufficient to advise a reader of the risks associated with MWD’s dwindling imported and stored water supplies given the possibility of a continuing drought. The fact that MWD is projected to use between 1 million acre-feet (MAF) to 1.3 MAF of its available storage reserves in calendar year (CY) 2014 alone is material. While MWD notes that it declared a Water Supply Alert last February and doubled its conservation subsidy budget, it does not mention that these efforts have thus far failed to reverse the demand trend that will result in the consumptive use of more than one-half of its available storage reserves in 2014.

Metropolitan Response: Metropolitan’s Board reviews available storage and the need to preserve storage for future use when it considers declaring a “Regional Shortage Level” under the Water Supply Allocation Plan. The Metropolitan Board will continue to receive regular updates and will determine where and when to obtain supplies to replenish storage and the associated cost. The possible impact on Metropolitan’s revenues and finances has been addressed in large part by allocating a portion of the reserves over target to a water management fund to be used specifically for drought response. Conservation efforts have reduced demands on Metropolitan by over 2

million acre-feet through FY 2013/14 and conservation efforts by the member agencies are expected to reduce demands throughout Metropolitan's service area. In addition, staff has been working with the member agencies to continue to resolve remaining issues associated with the drought and recommendations will be provided to the Board in December 2014.

A-4: Drought Response Actions. (continued) Appendix A should discuss and disclose how MWD plans to meet 2015 demands under these circumstances in the event that the drought continues. MWD should provide supporting facts, operational projections and the assumptions used to support its statement that the Colorado River Aqueduct is expected to operate at capacity, given that it projects that it will exhaust the bulk of its Lake Mead water storage in 2014. The analysis should include consideration of any delivery limitations MWD may experience in areas served exclusively by the State Water Project as well as MWD's plan to ensure that emergency storage reserves are preserved for their intended purposes (i.e. providing water service following a catastrophe that cuts off imported water supplies).

Metropolitan Response: Metropolitan anticipates operating the CRA at or near capacity using a combination of Colorado River water that Metropolitan has contractual rights to and water available under other programs that were developed to augment Colorado River supplies. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct" in Appendix A.

With respect to delivery limitations in areas served exclusively by the State Water Project, a number of operational actions were developed and implemented throughout Metropolitan's system in response to the drought and limitations on SWP supply. These actions are disclosed in Appendix A and were most recently presented at Metropolitan's Engineering and Operations Committee on November 17, 2014. Additionally, for actions taken to manage Metropolitan's water supplies, see "METROPOLITAN'S WATER SUPPLY—Drought Response Actions," "—Conservation," and "—Water Surplus and Drought Management Plan" in Appendix A.

A-5: Integrated Water Resources Plan. Appendix A should disclose that it would be imprudent to make any long term water supply planning decisions based on the badly outdated 2010 Integrated Resources Plan (IRP). Although the Draft Appendix A mentions that the IRP is scheduled to be updated in 2015, it does not disclose the risks of continuing to make decisions based on outdated data that is known to MWD today – a material deficiency. Moreover, MWD has not even begun to conduct the necessary coordination with member agencies to update the plan. In the past, it has taken MWD about two years to complete the update. Without having a current long-term supply plan and accurate data taking into account changed circumstances, MWD is at risk of committing to pay for long-term water supply projects in excess of what its member agencies are willing to buy. The IRP also assumes that MWD will have revenues available from water rates that have been declared illegal. MWD has claimed in court filings that this has a "destabilizing effect on MWD's rates and its ability to budget and plan" (our December 9, 2013 letter is attached for your ease of reference; see pages 1-3 (Dec. 9 Letter)).

If MWD actually believes its own representations to the Court, then this should be disclosed.

Metropolitan Response:

Metropolitan does not share the views expressed in this comment regarding the 2010 IRP. Metropolitan's IRP, adopted four years ago, sets long range targets and goals for Southern California's diversified water resource portfolio. It is designed to be updated periodically – about every five to ten years. Metropolitan will begin updating the IRP in 2015, and it is possible that it will not be finalized and adopted until 2016. Appendix A will be revised to reflect this. During the 2015/16 IRP process, Metropolitan will engage in extensive coordination with its member agencies to update the plan's long-term demand forecasts, supply projections and resource portfolio goals. Since the last IRP update in 2010, Metropolitan has provided implementation progress reports to the Board in 2011, 2012 and 2013, with another update scheduled for December 2014.

A-7: State Water Project. Appendix A should disclose that the Agreement in Principle reached to extend the State Water Project contract does not address cost allocation related to the Bay Delta Conservation Plan (BDCP). Depending on how BDCP costs are proposed to be allocated, MWD's share of the BDCP could vary widely and have a substantial impact on MWD's water rates and charges, and as a result, have a substantial impact on reducing MWD's future water sales. Since it is expected that the financing of BDCP will continue to be under a take-or-pay contract, MWD is at risk of being liable for payments far in excess of revenues that may reasonably be anticipated from water sales. In such a case, MWD would have no alternative but to find that increased taxes are necessary in order to ensure its fiscal integrity. These fiscal realities are capable of being addressed, and should be addressed in the Draft Appendix A.

Metropolitan Response: Metropolitan's disclosure related to the BDCP is contained on pages A-12 and A-13 of Appendix A, cost projections have been incorporated on the Table on page A-80, and BDCP projected costs for 2016/17 and 2017/18 are reflected in the ten-year forecast provided in the biennial budget for fiscal years 2014/15 and 2015/16 that was approved by Metropolitan's Board on April 8, 2014.

A-15: Water Bond. Appendix A should disclose that the Water Bond will provide funding for local water supply projects that are anticipated to reduce demand for MWD water supplies.

Metropolitan Response: As noted in Appendix A, Metropolitan is not able to assess at this time the impact that the water bond or the Water Quality, Supply, and Infrastructure Improvement Act of 2014 may have on Metropolitan.

A-32: Water Supply Allocation Plan. We have previously requested that disclosures be made regarding Preferential Rights that have not been made (Dec. 9 Letter, page 4). We renew our request that a more complete discussion of preferential rights be included in Appendix A. Disclosure should also be made of recent actions and communications from MWD member agencies with regard to enforcement of their preferential rights and the impact such actions would have on MWD's water supply planning, supply allocation and drought response.

Metropolitan Response: The statement that you previously questioned is a correct statement. To date, preferential rights have not been used in allocating Metropolitan's water. The preferential rights disclosure is included because the statutory right exists and any member agency might exercise its preferential right to purchase water in the future. Metropolitan has responded to a recent demand made by a member agency for groundwater replenishment deliveries of State Water Project water to a specific service connection. Preferential rights does not provide any member agency with a right to delivery of water from a specific source or to a specific connection.

A-49: Metropolitan Revenues: General. The MWD Act clearly limits property tax collections to the amount necessary to pay annual debt service on MWD's general obligation bonds, plus the portion of its State Water Contract payment obligation attributable to the debt service on State general obligation bonds for facilities benefitting MWD *that were outstanding as of 1990-91*. It is misleading to delete the qualifying language, "that were outstanding as of 1990-91." MWD should disclose that its own Chief Financial Officer, Gary Breaux, informed the MWD board prior to its vote in August of this year suspending the tax rate limitation that the action was *not* essential to the fiscal integrity of MWD. The action by the MWD board in suspending the tax rate limitation does not comply with Section 134 of the MWD Act. Further, it should be disclosed that the MWD board did not engage in any substantive discussion or deliberation of alternatives in order to achieve a "fair distribution of costs," and was provided with no data to support the conclusory statement by staff that suspension of the tax rate limitation would "enhance MWD's fiscal stability" or result in "a fair distribution of costs across MWD's service area."

Metropolitan Response: For purposes of clarity, the clause "*that were outstanding as of 1990-91*," has been reinserted into the location referenced in Appendix A. Appendix A also describes the findings of the Board in its resolutions adopted June 11, 2013; August 20, 2013; and August 19, 2014. These resolutions followed public hearings and notice to the Speaker of the California Assembly and the President pro Tempore of the Senate. The resolutions were adopted by the affirmative votes of directors representing more than a majority of the votes of all the member agencies and constitute an action of Metropolitan. The votes of a minority of directors against the resolution do not invalidate the majority approval of this resolution. Future findings regarding fiscal integrity, if any, will be within the discretion of the Board.

A-53: Delta Supply Surcharge. The Delta Supply Surcharge was, as stated, designed to recover additional supply costs associated with pumping restrictions. Appendix A should disclose the financial risks associated with the board's suspension of the Delta Supply Surcharge, even though the pumping restrictions remain in place, especially in the context of the staff recommendation to change the terms of MWD purchase orders (action this month) to eliminate Tier 2 revenues, the original purpose of which was also to recover the high cost associated with obtaining additional water supplies. Both actions result in setting the Tier 1 water rate higher

than the cost of providing that service. There is no rational basis for MWD reducing the rates associated with the costs of obtaining additional water supplies.

Metropolitan Response: On April 10, 2012, Metropolitan's Board, after extensive deliberations, decided to suspend the Delta Supply Surcharge effective January 1, 2013. The suspension of the surcharge does not increase financial risk to Metropolitan.

A-56: Member Agency Purchase Orders. Appendix A should disclose the purchase order modifications recommended by staff to be considered this month, including the financial impacts and risks associated with the elimination of MWD's Tier 2 revenues. MWD should also disclose that, during the trial of the Water Authority rate cases, MWD represented that Tier 2 revenues were a mechanism to ensure that all MWD member agencies pay their fair share of dry-year peaking costs. Since there has been no change in MWD's rates or cost of service, there is no explanation of how these costs will now be recovered except in the form of another illegal cross-subsidy.

Metropolitan Response: At the November 2014 meeting of Metropolitan's Board, the Board approved the proposed terms for the purchase orders, authorized the General Manager to execute purchase orders with member agencies opting to execute a purchase order, and to approve applicable amendments to Metropolitan's Administrative Code. Appendix A will be modified accordingly. However, the purchase order and related amendments to Metropolitan's Administrative Code do not eliminate Tier 2 revenues. The Tier 2 Supply Rate remains active and member agencies are subject to the Tier 2 Supply Rate. Tiered supply rates allow Metropolitan to cover higher incremental resource costs to supply users with increasing demands. Member agencies with increasing demands or member agencies that are unable to maintain local resources on an ongoing basis will be subject to the Tier 2 Supply Rate.

A-56: Classes of water service. This section of the Draft Appendix A is inaccurate and materially misleading in several respects. First, MWD has multiple rates, including a Water Stewardship Rate, System Access Rate, and System Power Rate and Wheeling Rate. MWD also sells treated and untreated water. The costs that MWD incurs to provide these and other services, such as dry-year peaking, are not the same for all MWD member agencies. These differences are required to be identified and the associated costs properly allocated through a cost-of-service process to ensure that beneficiaries pay for the services they receive. MWD's simplistic statement that it has a single class of water service is not only inaccurate; it results in rates that are illegal under California law and exposes MWD to the continued risk of litigation.

Metropolitan Response: The information contained in Appendix A regarding classes of water service is accurate and correct as described and is discussed and reviewed by Metropolitan's Board at least every two years.

A-58: Readiness-to-service Charge. Having disclosed that the RTS recovers only a portion of capital expenditures for infrastructure projects needed to provide standby service, Appendix A

should also disclose how the remaining portion of these capital costs are recovered. In addition, the statement that the RTS recovers capital expenditures related to “peak conveyance” needs is inconsistent with MWD’s rate memo; please explain this discrepancy and correct for it in one or both documents.

Metropolitan Response: The Readiness-to-Serve Charge provides for payment of debt service and other appropriately allocated costs for capital expenditures for infrastructure projects needed to provide standby service and peak conveyance service needs. Appendix A has been revised to clarify that the Readiness-to-Serve charge recovers the portion of capital expenditures for infrastructure projects needed to provide standby service and peak conveyance needs.

A-59: Financial Reserve Policy. MWD should disclose that the MWD board does not have unlimited discretion to determine how revenues are spent, through the creation of reserves, or otherwise; rather, all of MWD's rates and revenues are subject to California cost-of-service requirements under the common law, California statutes and Constitution. The planned over-collection of revenue and refusal to utilize balancing accounts or any other mechanism to account for and track revenues by rate category subjects MWD to the further risk of litigation.

Metropolitan Response: The information contained in Appendix A is correct. Metropolitan establishes rates and charges in accordance with cost of service requirements. Metropolitan’s funds, fund parameters, and use of reserves over the target are addressed in Metropolitan’s Administrative Code Sections 5200, 5201, and 5202.

A-62: Ten Largest Water Customers -Water Sales Revenues. It is highly misleading to characterize wheeling revenues as MWD "water sales." We have requested many times that you correct this summary so that investors are not required to figure out by reference to a small footnote that MWD's water sales are not as high as described.

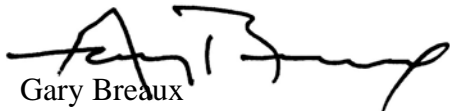
Metropolitan Response: Since those deliveries began in 2003, Metropolitan has consistently treated deliveries of Exchange Water as water sales. In addition, the characterization of water deliveries is consistent with the terms in the Exchange Agreement. The water sales information in Appendix A discloses that water sales revenues include revenues from water wheeling and exchanges. These revenues are classified as operating revenues accordingly.

A-63: California Ballot Initiatives - Proposition 26. Appendix A should include disclosure of the fact that Judge Curtis E.A. Karnow has already ruled that MWD is subject to Proposition 26 (2010). MWD should also disclose how or why, if it is not now subject to Prop. 26, it could "affect future water rates and charges."

Metropolitan Response: This section refers to “Litigation Challenging Rate Structure,” which describes SDCWA’s allegations under Proposition 26 and the trial court’s decision. The trial court’s ruling that Proposition 26 applies to Metropolitan’s rates effective in 2013 and 2014 is not final and is subject to independent review on appeal.

Thank you for your comments on Metropolitan’s Official Statement. We have carefully reviewed and considered them and circulated them to our bond counsel team, financial advisor, and underwriters. Appendix A will be revised to address certain comments as described in this letter.

Sincerely,



Gary Breaux
Assistant General Manager/Chief Financial Officer

cc: J. Kightlinger
MWD Board Members
SDCWA Board of Directors and Member Agencies

Attachment 1—Appendix A draft dated November 6, 2014, showing changes from the
April 30, 2014 draft

APPENDIX A

**The Metropolitan Water District
of Southern California**



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INTRODUCTION

This Appendix A provides general information regarding The Metropolitan Water District of Southern California (“Metropolitan”), including information regarding Metropolitan’s operations and finances. Statements included or incorporated by reference in this Appendix A constitute “forward-looking statements.” Such statements are generally identifiable by the terminology used such as “plan,” “project,” “expect,” “estimate,” “budget” or other similar words. Such statements are based on facts and assumptions set forth in Metropolitan’s current planning documents including, without limitation, its most recent biennial budget. The achievement of results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Actual results may differ from Metropolitan’s forecasts. Metropolitan is not obligated to issue any updates or revisions to the forward-looking statements in any event.

Metropolitan maintains a website that may include information on programs or projects described in this Appendix A; however, none of the information on Metropolitan’s website is incorporated by reference ~~and none of such information is~~ intended to assist investors in making an investment decision or to provide any additional information with respect to the information included in this Appendix A. The information presented on Metropolitan’s website is not part of the Official Statement and should not be relied upon in making investment decisions.

Formation and Purpose

Metropolitan is a metropolitan water district created in 1928 under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended (herein referred to as the “Act”). The Act authorizes Metropolitan to: levy property taxes within its service area; establish water rates; impose charges for water standby and service availability; incur general obligation bonded indebtedness and issue revenue bonds, notes and short-term revenue certificates; execute contracts; and exercise the power of eminent domain for the purpose of acquiring property. In addition, Metropolitan’s Board of Directors (the “Board”) is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan's service area.

Metropolitan’s primary purpose is to provide a supplemental supply of water for domestic and municipal uses at wholesale rates to its member public agencies. If additional water is available, such water may be sold for other beneficial uses. Metropolitan serves its member agencies as a water wholesaler and has no retail customers.

The mission of Metropolitan, as promulgated by the Board, is to provide its service area with adequate and reliable supplies of high quality water to meet present and future needs in an environmentally and economically responsible way.

Metropolitan’s charges for water sales and availability are fixed by its Board, and are not subject to regulation or approval by the California Public Utilities Commission or any other state or federal agency. Metropolitan imports water from two principal sources: northern California via the Edmund G. Brown California Aqueduct (the “California Aqueduct”) of the State Water Project owned by the State of California (the “State” or “California”) and the Colorado River via the Colorado River Aqueduct (“CRA”) owned by Metropolitan.

Member Agencies

Metropolitan is comprised of 26 member public agencies, including 14 cities, 11 municipal water districts, and one county water authority, which collectively serve the residents and businesses of more than

300 cities and numerous unincorporated communities. Member agencies request water from Metropolitan at various delivery points within Metropolitan’s system and pay for such water at uniform rates established by the Board for each class of water service. Metropolitan’s water is a supplemental supply for its member agencies, most of whom have other sources of water. See “METROPOLITAN REVENUES—Principal Customers” in this Appendix A for a listing of the ten member agencies with the highest water purchases from Metropolitan during the fiscal year ended June 30, [2013-2014](#). Metropolitan’s member agencies may, from time to time, develop additional sources of water. No member is required to purchase water from Metropolitan, but all member agencies are required to pay readiness-to-serve charges whether or not they purchase water from Metropolitan. See “METROPOLITAN REVENUES—Rate Structure”, “—Member Agency Purchase Orders” and “—Additional Revenue Components” in this Appendix A.

The following table lists the 26 member agencies of Metropolitan.

<u>Municipal Water Districts</u>		<u>Cities</u>		<u>County Water Authority</u>
Calleguas	Las Virgenes	Anaheim	Los Angeles	San Diego ⁽¹⁾
Central Basin	Orange County	Beverly Hills	Pasadena	
Eastern	Three Valleys	Burbank	San Fernando	
Foothill	West Basin	Compton	San Marino	
Inland Empire Utilities Agency		Fullerton	Santa Ana	
Upper San Gabriel Valley		Glendale	Santa Monica	
Western of Riverside County		Long Beach	Torrance	

(1) The San Diego County Water Authority, currently Metropolitan’s largest customer, is a plaintiff in litigation challenging the allocation of costs to certain rates adopted by Metropolitan’s Board. See “METROPOLITAN REVENUES—Litigation Challenging Rate Structure” in this Appendix A.

Service Area

Metropolitan’s service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. When Metropolitan began delivering water in 1941, its service area consisted of approximately 625 square miles. Its service area has increased by 4,500 square miles since that time. The expansion was primarily the result of annexation of the service areas of additional member agencies.

Metropolitan estimates that approximately 18.4 million people lived in Metropolitan’s service area in 2013, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (“SCAG”) and [the](#) San Diego Association of Governments (“SANDAG”). Population projections prepared by SCAG in 2012 and SANDAG in 2010, as part of their planning process to update regional transportation and land use plans, show expected population growth of about 18 percent in Metropolitan’s service area between 2010 and 2035. The 2010 Census population estimates are incorporated into SCAG’s 2012 projections. The 2010 SANDAG regional growth projections do not incorporate the 2010 Census population estimates. The economy of Metropolitan’s service area is exceptionally diverse. In [2012,2013](#), the economy of the six counties which contain Metropolitan’s service area had a gross domestic product larger than all but fifteen nations of the world. Metropolitan ~~provides~~[has historically provided](#) between 40 and 60 percent of the water used [annually](#) within its service area ~~every year~~. For additional economic and demographic information concerning the six county area containing Metropolitan’s service area, see Appendix E – “SELECTED DEMOGRAPHIC AND ECONOMIC INFORMATION FOR METROPOLITAN’S SERVICE AREA.”

The climate in Metropolitan’s service area ranges from moderate temperatures throughout the year in the coastal areas to hot and dry summers in the inland areas. Annual rainfall in an average year ~~is~~[has](#)

historically been approximately 13 to 15 inches along the coastal area, up to 20 inches in foothill areas and less than 10 inches inland.

METROPOLITAN'S WATER SUPPLY

Metropolitan faces a number of challenges in providing ~~a~~adequate, reliable and high quality water ~~supply~~supplies for southern California. These include, among others: (1) population growth within the service area; (2) increased competition for low-cost water supplies; (3) variable weather conditions; and (4) increased environmental regulations. Metropolitan's resources and strategies for meeting these long-term challenges are set forth in its Integrated Water Resources Plan, as updated from time to time. See "—Integrated Water Resources Plan" below.

Metropolitan's principal sources of water are the State Water Project and the Colorado River. Court decisions have restricted deliveries from the State Water Project in recent years as described below under "—State Water Project—*Endangered Species Act Considerations*." Precipitation, in the form of snow or rain, and its resulting runoff and storage levels are key indicators for Metropolitan's supplies from both its State Water Project and Colorado River sources. Snowpack, as presented below, is a percentage of the April 1 historical average water content. April 1 is recognized as the typical peak of the season in any given year.

California hydrology, which impacts deliveries from the State Water Project, is highly variable from year to year. In March 2011, following a three year drought, California Governor Jerry Brown proclaimed an end to the statewide drought emergency proclaimed in February 2009 by then-Governor Arnold Schwarzenegger. In 2011, California's snowpack peaked at 163 percent of normal. Drier conditions returned for 2012, with California statewide snowpack peaking in mid-April 2012 at 64 percent of normal. After large storms in November and December of 2012, California started 2013 with above normal snowpack conditions for the State. However, the California 2013 snowpack peaked in March at 61 percent of normal, and associated runoff was 65 percent of normal.

Calendar year 2013 was the driest on record in much of California and dry conditions continued through January 2014. ~~As a result of these below normal water supply conditions,~~ Despite above-average precipitation in February and March of 2014, Department of Water Resources ("DWR") storage in key reservoirs ~~is has been~~ well below normal ~~as of April 7, 2014, despite modest increases to reservoir storage from above average precipitation in February and March in~~ 2014. For example, as of ~~April 7,~~October 5, 2014, storage in Lake Oroville, the principal State Water Project reservoir, was at ~~65~~49 percent of average capacity and storage in San Luis Reservoir, a joint use facility of the State Water Project and federal Central Valley Project that is located south of the San Francisco Bay/Sacramento-San Joaquin River Delta ("Bay-Delta"), was at ~~50~~48 percent of average capacity. ~~In April 2014, The 2014 snowpack for the season peaked at 35 percent of normal in April 2014 and associated runoff was forecasted by DWR to be 4241 percent of normal, as of April 7, 2014.~~

Due to these record-dry conditions and lower than average water levels in State reservoirs, Governor Brown proclaimed a drought emergency on January 17, 2014. On January 31, 2014, DWR reduced the State Water Project allocation percentage to zero, reflecting the severity of California's drought.

On April 18, 2014, DWR increased ~~state water contractors~~State Water Project Contractors' allocations ~~for of~~ State Water Project ~~allocation~~water from zero to five percent due to February and March storms. Such allocations are made annually as a percentage of contracted amounts. At five percent, Metropolitan's State Water Project allocation for 2014 is approximately 95,000 acre-feet. DWR may revise allocations if warranted by the year's developing hydrologic and water supply conditions. See "METROPOLITAN'S WATER SUPPLY—State Water Project" in this Appendix A.

Despite improved conditions in February and March 2014, drought conditions continue and state water supplies remain far below average. As a result, Governor Brown issued an executive order on April 25, 2014, strengthening the state's authority to respond to the drought. The executive order expedites approvals of water transfers and exchanges, eases some environmental compliance requirements for drought response actions, and calls upon businesses and homeowners to limit potable water consumption, especially for landscaping.

Metropolitan's other principal source of water supply, the Colorado River, comes from watersheds of the Upper Colorado River basin in the states of Colorado, Utah, and Wyoming. Due to the way that Colorado River Supplies are apportioned, snowpack and runoff levels do not impact Metropolitan water supplies in the current year. Instead, snowpack and runoff impact storage levels at Lake Powell and Lake Mead, which in turn affect the likelihood of surplus or shortage conditions in the future. ~~As of April 7, 2014, snowpack measured at 113 percent of normal to date. As of April 2, 2014, runoff is forecasted by the Bureau of Reclamation to be 103 percent of normal. See "METROPOLITAN'S WATER SUPPLY~~ Precipitation in water year 2013-14 (October 1 – September 30) was above average, resulting in unregulated inflow to Lake Powell of approximately 100 percent of normal, which is only the fourth time this has happened since water year 2003-04. As of September 7, 2014 total system storage in the Colorado River Basin was 51 percent of normal, which is equivalent to September 2013 storage levels. See "—Colorado River—" Aqueduct" below.

Uncertainties from potential future temperature and precipitation changes in a climate driven by increased concentrations of atmospheric carbon dioxide also present challenges. Areas of concern to California water planners identified by researchers include: reduction in Sierra Nevada snowpack; increased intensity and frequency of extreme weather events; and rising sea levels resulting in increased risk of damage from storms, high-tide events, and the erosion of levees and potential cutbacks of deliveries from the State Water Project. While potential impacts from climate change remain subject to study and debate, climate change is among the uncertainties that Metropolitan seeks to address through its planning processes.

Drought Response Actions

At this time, it is not possible to forecast the impact of the current California drought on Metropolitan water supplies. ~~Nevertheless, Metropolitan is well positioned to meet demands in 2014, despite the low allocation from DWR for State Water Project supplies. Having two principal sources of supply that draw from two different watersheds, Metropolitan is~~ Metropolitan estimates that 2014 year-end overall water storage will be between 1.7 million acre-feet and 2.0 million acre-feet. In 2014, Metropolitan has been able to utilize supplies from the Colorado River to offset reductions in State Water Project supplies and ~~buffer~~mitigate impacts of the California drought. Metropolitan ~~plans to use Colorado River Aqueduct~~is also encouraging responsible and efficient water use to lower demands. Since Governor Brown's January 2014 drought emergency proclamation, Metropolitan has worked proactively with its member agencies to conserve water supplies in its service area. In February 2014, Metropolitan declared a Water Supply Alert, calling upon local cities and water agencies to immediately implement extraordinary conservation measures and institute local drought ordinances. Metropolitan also significantly expanded its water conservation and outreach programs. This includes doubling the water conservation budget, increasing the incentive for a turf replacement program, and launching the largest media outreach campaign in Metropolitan's history. Metropolitan also increased incentives for large landscape customers to convert from potable water to recycled water for irrigation. See "—Water Conservation" below.

Metropolitan is prepared to meet water demands in its service area in calendar year 2015 using a combination of CRA deliveries, storage reserves and supplemental water transfers and purchases ~~to meet regional demands. As of January 1, 2014, Metropolitan held approximately 2.95 million acre-feet of water in storage. See "METROPOLITAN'S WATER SUPPLY~~ . In 2015, the CRA is anticipated to operate at capacity and operations to move Colorado River supplies into areas normally served by State Water Project supplies that began in 2014 are expected to continue in 2015. Metropolitan is also working to carryover

unused 2014 State Water Project supplies into 2015. These measures will offset potentially low initial State Water Project supply allocations in 2015. Metropolitan also relies upon its [Water Surplus and Drought Management Plan](#) (“WSDM Plan”) to identify resource actions in times of shortage and its [Water Supply Allocation Plan](#) for equitable distribution of available water supplies in case of extreme shortages. Should drought conditions continue through 2015, Metropolitan is prepared to implement the [Water Supply Allocation Plan](#). See “—Storage Capacity and Water in Storage.”, “—Water Conservation” and “—Water Supply Allocation Plan” below.

~~While sizeable water reserves position Metropolitan to meet demands in its service area in 2014, Metropolitan is encouraging responsible and efficient water use to lower demands. In March 2014, Metropolitan approved \$20 million for conservation outreach and advertising in addition to the \$20 million in conservation outreach funding in the biennial budget.~~

Metropolitan’s financial reserve policy provides funds to manage through periods of reduced sales. See “METROPOLITAN REVENUES—Financial Reserve Policy.” In years when actual sales are less than projections, Metropolitan uses various tools to manage reductions in revenues, such as reducing expenditures below budgeted levels, reducing funding of capital from revenues, and drawing on reserves. In years when actual sales exceed projections, the revenues from water sales during the fiscal year will exceed budget, potentially resulting in an increase in financial reserves. On April 8, 2014, Metropolitan’s Board approved multiple uses of certain unrestricted reserves over the target level on June 30, 2014, which ~~include~~included a deposit of ~~funds, currently estimated at \$150~~\$252 million; to a Water Management Fund ~~to~~, \$232 million of which will cover costs associated with replenishing storage, purchasing transfers and funding drought response programs, and \$20 million for conservation related programs. See “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Revenues.” in this Appendix A.

Integrated Water Resources Plan

The [Integrated Water Resources Plan](#) (“IRP”) is Metropolitan’s principal water resources planning document. Metropolitan, its member agencies, sub-agencies and groundwater basin managers developed their first ~~Integrated Water Resources Plan (“IRP”)~~IRP, which was adopted by the Board in January 1996 and updated in 2004, as a long-term planning guideline for resources and capital investments. The next update of the IRP is scheduled to be updated in 2015. The purpose of the IRP was the development of a portfolio of preferred resources (see “—The Integrated Resources Plan Strategy” below) to meet the water supply reliability and water quality needs for the region in a cost-effective and environmentally sound manner.

On October 12, 2010, Metropolitan’s Board adopted an IRP update (the “2010 IRP Update”) as a strategy to set goals and a framework for water resources development. This strategy enables Metropolitan and its member agencies to manage future challenges and changes in California’s water conditions and to balance investments with water reliability benefits. The 2010 IRP Update provides an adaptive management approach to address future uncertainty, including uncertainty from climate change. It was formulated with input from member agencies, retail water agencies, and other stakeholders including water and wastewater managers, environmental and business interests and the community. The framework places an emphasis on regional collaboration.

The 2010 IRP Update seeks to provide regional reliability through 2035 by stabilizing Metropolitan’s traditional imported water supplies and continuing to develop additional local resources, with an increased emphasis on regional collaboration. It also advances long-term planning for potential future contingency resources, such as storm water capture and large-scale seawater desalination, in close coordination with Metropolitan’s 26 member agencies and other utilities.

The 2010 IRP Update is available on Metropolitan’s web site at <http://www.mwdh2o.com/mwdh2o/pages/yourwater/irp/>. Specific projects that may be developed by

Metropolitan in connection with the implementation of the IRP will be subject to future Board consideration and approval, as well as environmental and regulatory documentation and compliance. The information set forth on Metropolitan’s website is not incorporated by reference.

The Integrated Resources Plan Strategy

The IRP Strategy identifies a balance of local and imported water resources within Metropolitan’s service area. Metropolitan expects that the core resource strategy, uncertainty buffers and foundational actions in the IRP Strategy will be continually reviewed and updated at least every five years to reflect changing demand and supply conditions. Foundational actions include technical studies and research (up to pilot projects, but not full-scale projects) that enable timely, future implementation of challenging resources, including, but not limited to, recycled water, seawater desalination, stormwater capture, and groundwater enhancement.

The following paragraphs describe several elements of the IRP Strategy.

State Water Project. The State Water Project is one of Metropolitan’s two major sources of water. In addition to municipal and industrial use of this core supply, State Water Project supplies are important for maximizing local groundwater potential and the use of recycled water since State Water Project water has lower salinity content than Colorado River Aqueduct water and can be used to increase groundwater conjunctive use applications. See “—State Water Project” below and “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

Colorado River Aqueduct. The Colorado River Aqueduct delivers water from the Colorado River, Metropolitan’s original source of supply. Metropolitan has helped to fund and implement farm and irrigation district conservation programs, improvements to river operation facilities, land management programs and water transfers and exchanges through agreements with agricultural water districts in southern California and entities in Arizona and Nevada that use Colorado River water. See “—Colorado River Aqueduct” below.

Water Conservation. Conservation and other water use efficiencies are integral components of Metropolitan’s IRP. Metropolitan has invested in conservation programs since the 1980s. Historically, most of the investments have been in water efficient fixtures in the residential sector. Current efforts also focus on outdoor and commercial water use. See “—Water Conservation” below.

Recycled Water. Reclaimed or recycled municipal and industrial water is ~~not potable, but~~ [a valuable water resource and](#) can be used for landscape irrigation, agriculture, protecting groundwater basins from saltwater intrusion, industrial processes, and recharging local aquifers. Metropolitan offers financial incentives to member agencies for developing economically viable reclamation projects. See “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

Conjunctive Use. Conjunctive use is the coordinated use of surface water supplies and groundwater storage. It entails storing surplus imported water during the winter months or wet years in local surface reservoirs and recharging local groundwater basins, then using the stored supplies during dry months and droughts, thus increasing the supply reliability of the region. See “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

Water Transfers and Exchanges. Under voluntary water transfer or exchange agreements, agricultural communities using irrigation water may periodically sell some of their water allotments to urban areas. The water may be delivered through existing State Water Project or Colorado River Aqueduct facilities, or may be exchanged for water that is delivered through such facilities. Metropolitan’s policy toward potential transfers states that the transfers will be designed to protect and, where feasible, enhance

environmental resources and avoid the mining of local groundwater supplies. See “—Water Transfer, Storage and Exchange Programs” below.

Groundwater Recovery. Natural groundwater reservoirs serve an important function as storage facilities for local and imported water. ~~When~~In cases where groundwater storage ~~becomes~~has become contaminated, water agencies have to rely more heavily on imported water supplies. Treatment for polluted groundwater is quite costly and poses environmental challenges. Metropolitan offers financial incentives to help fund member agency groundwater recovery projects. See “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

Seawater Desalination. Seawater desalination is the process of removing salts from ocean water to produce potable supplies. It is a potential new local supply that could help increase supply reliability in Metropolitan’s service area. Metropolitan offers financial incentives to member agencies for seawater desalination projects through its Seawater Desalination Program. Currently, there are a number of seawater desalination projects ~~are either~~ under development or in the planning phase within Metropolitan’s service area. See “REGIONAL WATER RESOURCES—Local Water Supplies” and “METROPOLITAN REVENUES—Rate Structure” in this Appendix A.

State Water Project

General. One of Metropolitan’s two major sources of water is the State Water Project, which is owned by the State and operated by DWR. This project transports Feather River water stored in and released from Oroville Dam and unregulated flows diverted directly from Bay-Delta south via the California Aqueduct to four delivery points near the northern and eastern boundaries of Metropolitan’s service area. The total length of the California Aqueduct is approximately 444 miles.

In 1960, Metropolitan signed a water supply contract (as amended, the “State Water Contract”) with DWR. Metropolitan is one of 29 agencies that have long-term contracts for water service from DWR, and is the largest agency in terms of the number of people it serves (approximately 18.4 million), the share of State Water Project water that it has contracted to receive (approximately 46 percent), and the percentage of total annual payments made to DWR by agencies with State water contracts (approximately 53 percent for ~~2012~~2013). For information regarding Metropolitan’s obligations under the State Water Contract, see “METROPOLITAN EXPENDITURES—State Water Contract Obligations” in this Appendix A. Upon expiration of the State Water Contract term (currently in 2035), Metropolitan has the option to continue service under substantially the same terms and conditions. Metropolitan and other agencies with state water supply contracts are currently in negotiations with DWR to extend the State Water Contract. In June 2014, DWR and the State Water Project Contractors reached an Agreement in Principle (“AIP”) to extend the contract to 2085 and to make certain changes related to financial management of the State Water Project in the future. The AIP will serve as the “proposed project” for purposes of environmental review under the California Environmental Quality Act (“CEQA”). DWR issued a Notice of Preparation of an Environmental Impact Report (“EIR”) for the proposed project on September 14, 2014. Following CEQA review, a State Water Project amendment will be prepared. Such amendment will be subject to review by the Legislature.

The State Water Contract, under a 100 percent allocation, provides Metropolitan 1,911,500 acre-feet of water. (An acre-foot is the amount of water that will cover one acre to a depth of one foot and equals approximately 326,000 gallons, which represents the needs of two average families in and around the home for one year.) The 100 percent allocation is referred to as the contracted amount. Each year in November, DWR announces an initial allocation estimate, but may revise the estimate throughout the year if warranted by developing precipitation and water supply conditions. From calendar years 2003 through 2013, the amount of water received by Metropolitan from the State Water Project, including water from water transfer, groundwater banking and exchange programs delivered through the California Aqueduct, described below

under “—Water Transfer, Storage and Exchange Programs,” varied from a low of 908,000 acre-feet in calendar year 2009 to a high of 1,800,000 acre-feet in 2004.

For calendar year 2012, DWR’s allocation to State Water Project ~~contractors~~Contractors was 65 percent of contracted amounts which provided 1,242,475 acre-feet of Metropolitan’s 1,911,500 acre-foot contractual amount. In addition, Metropolitan began 2012 with 243,000 acre-feet of carryover supplies from prior years. In calendar year 2013, DWR’s allocation to State Water Project ~~contractors~~Contractors was 35 percent of contracted amounts, or ~~669,025~~669,000 acre-feet of Metropolitan’s 1,911,500 acre-foot contractual amount. In addition, Metropolitan began 2013 with approximately 281,000 acre-feet of carryover supplies from prior years. See “—Water Transfer, Storage and Exchange Programs” and “—Storage Capacity and Water in Storage” below.

For calendar year 2014, DWR’s allocation to State Water Project ~~contractors~~Contractors was announced on April 18, 2014, as five percent of ~~the contracted amount, its 1,911,500 acre-foot contractual amount. Under this allocation, Metropolitan will receive~~ approximately 95,575 acre-feet. ~~This of contracted amounts. In addition, Metropolitan began 2014 with approximately 223,000 acre-feet of carryover supplies from prior years, all of which can be drawn in 2014. Through September 2014, Metropolitan has used 215,000 acre-feet of these carryover supplies and plans to use all 223,000 acre-feet by the end of the year. Although Metropolitan plans to use all carry over State Water Project Supplies accumulated in years prior to 2014, it is also working to carry over unused 2014 State Water Project supplies into 2015.~~

DWR’s 2014 allocation reflects that calendar year 2013 was the driest on record in much of California, dry conditions ~~have~~ persisted in 2014, storage levels are low in the State’s major reservoirs, drought conditions occurred in previous years, and federally mandated environmental restrictions have been imposed upon water deliveries from the Bay Delta, including the potential for additional limitations as a result of the currently controlling Delta smelt biological opinion as discussed below. ~~Metropolitan began 2014 with approximately 223,000 acre feet of carryover supplies from prior years, all of which can be drawn in 2014.~~ As in previous dry years, Metropolitan ~~may augment~~is augmenting these deliveries using withdrawals from its storage programs along the State Water Project and through water transfer and exchange programs. See “METROPOLITAN’S WATER SUPPLY—Water Transfer, Storage and Exchange Programs” in this Appendix A.

Endangered Species Act Considerations

General. The listing of several fish species as threatened or endangered under the federal or California Endangered Species Acts (respectively, the “Federal ESA” and the “California ESA” and, collectively, the “ESAs”) have adversely impacted State Water Project operations and limited the flexibility of the State Water Project. Currently, five species (the winter-run and spring-run Chinook salmon, Delta smelt, North American green sturgeon and Central Valley steelhead) are listed under the ESAs. In addition, on June 25, 2009, the California Fish and Game Commission declared the longfin smelt a threatened species under the California ESA.

The Federal ESA requires that before any federal agency authorizes funds or carries out an action it must consult with the appropriate federal fishery agency to determine whether the action would jeopardize the continued existence of any threatened or endangered species, or adversely modify habitat critical to the species’ needs. The result of the consultation is known as a “biological opinion.” In the biological opinion the federal fishery agency determines whether the action would cause jeopardy to a threatened or endangered species or adverse modification to critical habitat and recommends reasonable and prudent alternatives or measures that would allow the action to proceed without causing jeopardy or adverse modification. The biological opinion also includes an “incidental take statement.” The incidental take statement allows the action to go forward even though it will result in some level of “take,” including harming or killing some members of the species, incidental to the agency action, provided that the agency action does not jeopardize

the continued existence of any threatened or endangered species and complies with reasonable mitigation and minimization measures recommended by the federal fishery agency.

In 2004 and 2005, the United States Fish and Wildlife Service (“USFWS”) and National Marine Fisheries Service issued biological opinions and incidental take statements governing the coordinated operations of the State Water Project and the federal Central Valley Project with respect to the Delta smelt, the winter-run and spring-run Chinook salmon and the Central Valley steelhead. In July 2006, the Bureau of Reclamation reinitiated consultation with the USFWS and National Marine Fisheries Service with respect to the 2004 and 2005 biological opinions (with the addition of the North American green sturgeon, which was listed in April 2006) following the filing of legal challenges to those biological opinions and incidental take statements described under “*Federal ESA Litigation*” below. Under the Federal ESA, critical habitat must also be designated for each listed species. Critical habitat has been designated for each of the currently listed species.

Federal ESA Litigation. Litigation filed by several environmental interest groups (*NRDC v. Kempthorne*; and *Pacific Coast Federation of Fishermen’s Associations v. Gutierrez*) in the United States District Court for the Eastern District of California alleged that the 2004 and 2005 biological opinions and incidental take statements inadequately analyzed impacts on listed species under the Federal ESA.

Delta Smelt Consolidated Cases. On May 25, 2007, Federal District Judge Wanger issued a decision on summary judgment in *NRDC v. Kempthorne*, finding the USFWS biological opinion for Delta smelt to be invalid. The USFWS released a new biological opinion on the impacts of the State Water Project and Central Valley Project on Delta smelt on December 15, 2008. Metropolitan, the San Luis & Delta Mendota Water Authority, Westlands Water District, Kern County Water Agency, Coalition for a Sustainable Delta and State Water Contractors, a California nonprofit corporation formed by agencies contracting with DWR for water from the State Water Project (the “State Water Contractors”), the Family Farm Alliance and the Pacific Legal Foundation, on behalf of several owners of small farms in California’s Central Valley, filed separate lawsuits in federal district court challenging the biological opinion. The federal court consolidated these lawsuits under the caption *Delta Smelt Consolidated Cases*.

On December 14, 2010, Judge Wanger issued a decision on summary judgment finding that there were major scientific and legal flaws in the Delta smelt biological opinion. The court found that some but not all of the restrictions on project operations contained in the 2008 Delta smelt biological opinion were arbitrary, capricious and unlawful. On May 18, 2011, Judge Wanger issued a final amended judgment directing the USFWS to complete a new draft biological opinion by October 1, 2011, and a final biological opinion with environmental documentation by December 1, 2013. Later stipulations and orders changed the October 1, 2011 due date for a draft biological opinion to December 14, 2011, and changed the December 1, 2013 due date for the final biological opinion to December 1, 2014. A draft biological opinion was issued on December 14, 2011. The draft biological opinion deferred specification of a reasonable and prudent alternative and an incidental take statement pending completion of environmental impact review under the National Environmental Policy Act (“NEPA”). The federal defendants and environmental intervenors appealed the final judgment invalidating the 2008 Delta smelt biological opinion to the U.S. Court of Appeals for the Ninth Circuit. State Water Project and Central Valley Project contractor plaintiffs, including Metropolitan, cross-appealed from the final judgment. Those appeals and cross-appeals were argued on September 10, 2012.

On March 13, 2014, the Ninth Circuit reversed in part and affirmed in part the district court’s decision. The Ninth Circuit reversed those portions of the district court decision which had found the 2008 Delta smelt biological opinion to be arbitrary and capricious, and held, instead, that the 2008 biological opinion was valid and lawful. Metropolitan’s deliveries from the State Water Project were previously restricted under the 2008 biological opinion for a period prior to 2011. One practical result of the Ninth Circuit’s decision is to legally approve the water supply restrictions in the 2008 biological opinion. These water supply restrictions could have a range of impacts on Metropolitan’s deliveries from the State Water

Project depending on hydrologic conditions. ~~Metropolitan and others will file motions for reconsideration of the Ninth Circuit's decision by May 12, 2014. The decision is also subject to a petition for~~ The Court denied the petitions for rehearing filed by the Department of Water Resources, Metropolitan and other State Water Contractors, and the Federal Water Contractors. On October 6, 2014, the Federal and State Water Contractors filed a petition for a writ of certiorari to review the Ninth Circuit's decision with the U.S. Supreme Court. ~~Any impacts in 2014 will be limited by the 2014 allocation estimate of five percent for. Any adverse impact of this litigation and ruling on Metropolitan's State Water Project supplies and Metropolitan has not completed its assessment of any future impacts the decision may have. See "METROPOLITAN'S WATER SUPPLY cannot be determined at this time. See "—State Water Project—General," above and "—State Water Project Operational Constraints" in this Appendix A," below.~~

Consolidated Salmon Cases. ~~On February 25, 2011, the federal court approved a settlement agreement modifying biological opinion restrictions on Old and Middle River flows that would have otherwise applied in spring 2011. The settlement agreement expired on June 30, 2011. State Water Project and Central Valley Project contractors also moved to enjoin certain fall salinity requirements in the biological opinion that were set to become operable in September and October 2011. After an evidentiary hearing on the water contractors' motion in July 2011, Judge Wanger issued a decision on August 31, 2011, modifying the fall salinity related requirements in the biological opinion. The effect of the injunction was to reduce water supply impacts from the biological opinion's fall salinity requirements. The federal defendants and the environmental intervenors appealed the injunction on fall salinity requirements but the federal defendants subsequently dismissed their appeal in October 2011. State Water Project and Central Valley Project contractors moved to dismiss the environmental intervenors' appeal of the fall salinity requirement on the ground that the salinity requirement for 2011 has expired, and is therefore moot. On August 23, 2012, the Ninth Circuit granted the water contractors' motion and dismissed the fall salinity appeal as moot.~~ On April 16, 2008, in *Pacific Coast Federation of Fishermen's Associations v. Gutierrez*, the court invalidated the 2004 National Marine Fisheries Service's biological opinion for the salmon and other fish species that spawn in rivers flowing into the Bay-Delta. Among other things, the court found that the no-jeopardy conclusions in the biological opinion were inconsistent with some of the factual findings in the biological opinion; that the biological opinion failed to adequately address the impacts of State Water Project and Central Valley Project operations on critical habitat and that there was a failure to consider how climate change and global warming might affect the impacts of the projects on salmonid species.

On June 4, 2009, the National Marine Fisheries Service released a new biological opinion for salmonid species to replace the 2004 biological opinion. The 2009 salmonid species biological opinion contains additional restrictions on State Water Project and Central Valley Project operations. The National Marine Fisheries Service calculated that these restrictions will reduce the amount of water the State Water Project and Central Valley Project combined will be able to export from the Bay-Delta by five to seven percent. DWR had estimated a 10 percent average water loss under this biological opinion. See "*—State Water Project Operational Constraints*" below for the estimated impact to Metropolitan's water supply. Six lawsuits were filed challenging the 2009 salmon biological opinion. These various lawsuits have been brought by the San Luis & Delta Mendota Water Authority, Westlands Water District, Stockton East Water District, Oakdale Irrigation District, Kern County Water Agency, the State Water Contractors and Metropolitan. The court consolidated the cases under the caption *Consolidated Salmon Cases*.

On May 25, 2010, the court granted the plaintiffs' request for preliminary injunction in the *Consolidated Salmon Cases*, restraining enforcement of two requirements under the salmon biological opinion that limit exported water during the spring months based on San Joaquin River flows into the Bay-Delta and reverse flows on the Old and Middle Rivers. Hearings on motions for summary judgment in the *Consolidated Salmon Cases* were held on December 16, 2010. On September 20, 2011, Judge Wanger issued a decision on summary judgment, finding that the salmon biological opinion was flawed, and that some but not all of the project restrictions in the biological opinion were arbitrary and capricious. On December 12, 2011, Judge O'Neill (who was assigned to this case following Judge Wanger's retirement) issued a final judgment in the *Consolidated Salmon Cases*. The final judgment remands the 2009 salmon

biological opinion to the National Marine Fisheries Service, and directs that a new draft salmon biological opinion be issued ~~by October 1, 2014, and that a final biological opinion be issued by February 1, 2016,~~ after completion of environmental impact review under NEPA. The due date for the draft salmon biological opinion was ~~later extended to October 1, 2015, and the due date for the final opinion was~~ extended to February 1, 2017. On January 19, 2012, Judge O'Neill approved a joint stipulation of the parties that specifies how to comply with one of the salmon biological opinion restrictions that applies to water project operations in April and May of 2012. In January and February 2012, the federal defendants and environmental intervenors filed appeals of the final judgment in the *Consolidated Salmon Cases*, and State Water Project and Central Valley Project contractors filed cross-appeals. Those appeals and cross-appeals ~~are now pending in~~ were argued on September 15, 2014 and the parties are awaiting a decision from the Ninth Circuit. ~~Oral argument is scheduled for September 2014. On November 13, 2009, the Center for Biological Diversity filed separate lawsuits challenging the USFWS' failure to respond to a petition to change the Delta smelt's federal status from threatened to endangered and the USFWS' denial of federal listing for the longfin smelt. On April 2, 2010, the USFWS issued a finding that uplisting the Delta smelt was warranted but precluded by the need to devote resources to higher priority matters. This "warranted but precluded" finding did not change the regulatory restrictions applicable to Delta smelt. For the longfin smelt litigation, a settlement agreement was approved on February 2, 2011. Under the agreement, the USFWS agreed to complete a range wide status review of the longfin smelt and consider whether the Bay Delta longfin smelt population, or any other longfin smelt population from California to Alaska, qualifies as a "distinct population" that warrants federal protection. On April 2, 2012, the USFWS issued its finding that the Bay Delta longfin smelt population warrants protection under the ESA but is precluded from listing as a threatened or endangered species by the need to address other higher priority listing actions. The review identified several threats facing longfin smelt in the Bay Delta, including reduced freshwater Bay Delta outflows. The finding includes the determination that the Bay Delta longfin smelt will be added to the list of candidates for ESA protection, where its status will be reviewed annually.~~

California ESA Litigation. In addition to the litigation under the Federal ESA, other environmental groups sued DWR on October 4, 2006 in the Superior Court of the State of California for Alameda County alleging that DWR was "taking" listed species without authorization under the California ESA. This litigation (*Watershed Enforcers, a project of the California Sportfishing Protection Alliance v. California Department of Water Resources*) requested that DWR be mandated to either cease operation of the State Water Project pumps, which deliver water to the California Aqueduct, in a manner that results in such "taking" of listed species or obtain authorization for such "taking" under the California ESA. On April 18, 2007, the Alameda County Superior Court issued its Statement of Decision finding that DWR was illegally "taking" listed fish through operation of the State Water Project export facilities. The Superior Court ordered DWR to "cease and desist from further operation" of those facilities within 60 days unless it obtained take authorization from the California Department of Fish and Game.

DWR appealed the Alameda County Superior Court's order on May 7, 2007. This appeal stayed the order pending the outcome of the appeal. The Court of Appeal stayed processing of the appeal in 2009 to allow time for DWR to obtain incidental take authorization for the Delta smelt and salmon under the California ESA, based on the consistency of the federal biological opinions with California ESA requirements ("Consistency Determinations"). After the California Department of Fish & Game issued the Consistency Determinations under the California ESA, authorizing the incidental take of both Delta smelt and salmon, appellants DWR and State Water Contractors dismissed their appeals of the *Watershed Enforcers* decision. The Court of Appeal subsequently issued a decision finding that DWR was a "person" under the California ESA and subject to its take prohibitions, which was the only issue left in the case. The State Water Contractors and Kern County Water Agency have filed suit in state court challenging the Consistency Determinations under the California ESA that have been issued for both Delta smelt and salmon. Those lawsuits challenging the Consistency Determinations ~~are pending. The parties are continuing discussions of adjustments to the incidental take authorizations in light of the summary judgment ruling in the *Delta Smelt Consolidated Cases* and the *Consolidated Salmon Cases*, discussed under the heading~~

~~“—have been stayed and are awaiting the final rulings in federal court regarding the validity of the Delta smelt and salmon biological opinions. —See “Federal ESA Litigation” above.~~

The California Fish and Game Commission listed the longfin smelt as a threatened species under the California ESA on June 25, 2009. On February 23, 2009, in anticipation of the listing action, the California Department of Fish and Game issued a California ESA section 2081 incidental take permit to DWR authorizing the incidental take of longfin smelt by the State Water Project. This permit authorizes continued operation of the State Water Project under the conditions specified in the section 2081 permit. The State Water Contractors filed suit against the California Department of Fish and Game on March 25, 2009, alleging that the export restrictions imposed by the section 2081 permit have no reasonable relationship to any harm to longfin smelt caused by State Water Project operations, are arbitrary and capricious and are not supported by the best available science. ~~The lawsuit is pending and the administrative record for the cases has been completed~~This lawsuit was voluntarily dismissed in 2014 pursuant to a settlement agreement which set up a collaborative multi-year longfin smelt science program to investigate various factors relating to the impacts of water project operations on longfin smelt.

State Water Project Operational Constraints. DWR has altered the operations of the State Water Project to accommodate species of fish listed under the ESAs. These changes in project operations have adversely affected State Water Project deliveries. The impact on total State Water Project deliveries attributable to the Delta smelt and salmonid species biological opinions combined is estimated to be one million acre-feet in an average year, reducing State Water Project deliveries from approximately 3.3 million acre-feet to approximately 2.3 million acre-feet for the year under average hydrology, and are estimated to range from 0.3 million acre-feet during critically dry years to 1.3 million acre-feet in above normal water years. State Water Project deliveries to contractors for calendar years 2008 through 2012 were reduced by a total of approximately 2.3 million acre-feet as a result of pumping restrictions. Pumping restrictions impacting the State Water Project allocation for calendar year 2013 have reduced exports by approximately 596,000 acre-feet.

Operational constraints likely will continue until long-term solutions to the problems in the Bay-Delta are identified and implemented. ~~The Delta Vision process, established by then Governor Schwarzenegger, was aimed at identifying long term solutions to the conflicts in the Bay-Delta, including natural resource, infrastructure, land use and governance issues. In addition,~~ State and federal resource agencies and various environmental and water user entities are currently engaged in the development of the Bay-Delta Conservation Plan, which is aimed at addressing ecosystem needs and securing long-term operating permits for the State Water Project, and includes the Delta Habitat Conservation and Conveyance Program (“DHCCP”) (together, the “BDCP”). The BDCP’s current efforts consist of the preparation of the environmental documentation and preliminary engineering design for Bay-Delta water conveyance and related habitat conservation measures under the BDCP. ~~The Delta Vision process and the BDCP~~These programs are discussed further under “—*Bay-Delta Regulatory and Planning Activities*” below.

Other issues, such as the decline of some fish populations in the Bay-Delta and surrounding regions and certain operational actions in the Bay-Delta, may significantly reduce Metropolitan’s water supply from the Bay-Delta. State Water Project operational requirements may be further modified under new biological opinions for listed species under the Federal ESA or by the California Department of Fish and Game’s issuance of incidental take authorizations under the California ESA. Biological opinions or incidental take authorizations under the Federal ESA and California ESA might further adversely affect State Water Project and Central Valley Project operations. Additionally, new litigation, listings of additional species or new regulatory requirements could further adversely affect State Water Project operations in the future by requiring additional export reductions, releases of additional water from storage or other operational changes impacting water supply operations. Metropolitan cannot predict the ultimate outcome of any of the litigation or regulatory processes described above but believes they could have a materially adverse impact on the operation of State Water Project pumps, Metropolitan’s State Water Project supplies and Metropolitan’s water reserves.

~~“Area of Origin” Litigation. Four State Water Project contractors located north of the State Water Project’s Bay-Delta pumping plant filed litigation against DWR on July 17, 2008, asserting that, because they are located in the “area of origin” of State Water Project water, they are entitled to receive their entire contract amount before any water is delivered to contractors south of the Bay-Delta. Metropolitan and twelve other State Water Project contractors located south of the Bay-Delta intervened in this litigation. The parties reached a settlement that requires plaintiffs to dismiss the action with prejudice and agree to certain limitations on asserting area of origin arguments in the future. In return, DWR and the intervenors agreed to operational changes that will increase the reliability of plaintiffs’ State Water Project supplies at little or minimal cost to other State Water Project contractors. On March 30, 2014, the court approved the settlement agreement, and dismissed the matter with prejudice.~~

Bay-Delta Regulatory and Planning Activities. The State Water Resources Control Board (“SWRCB”) is the agency responsible for setting water quality standards and administering water rights throughout California. Decisions of the SWRCB can affect the availability of water to Metropolitan and other users of State Water Project water. The SWRCB exercises its regulatory authority over the Bay-Delta by means of public proceedings leading to regulations and decisions. These include the Bay-Delta Water Quality Control Plan (“WQCP”), which establishes the water quality objectives and proposed flow regime of the estuary, and water rights decisions, which assign responsibility for implementing the objectives of the WQCP to users throughout the system by adjusting their respective water rights. The SWRCB is required by law to periodically review its WQCP to ensure that it meets the changing needs of this complex system.

Since 2000, SWRCB’s Water Rights Decision 1641 (“D-1641”) has governed the State Water Project’s ability to export water from the Bay-Delta for delivery to Metropolitan and other agencies receiving water from the State Water Project. D-1641 allocated responsibility for meeting flow requirements and salinity and other water quality objectives established earlier by the WQCP. The SWRCB also identified additional issues to review, which could result in future changes in water quality objectives and flows that could affect exports of water from the State Water Project. Currently, the SWRCB is reviewing salinity objectives in the Bay-Delta intended to protect Bay-Delta farming and inflow requirements upstream of the Delta to protect aquatic species. DWR and the Bureau of Reclamation filed a petition on January 29, 2014, requesting changes to D-1641 terms that govern outflows in the Bay-Delta. The SWRCB approved temporary urgency changes in the required outflows into the Bay-Delta on January 31, 2014, enabling water to be conserved in reservoirs in case of continued drought. The temporary urgency changes also permit flexible operation of gates that typically remain closed during the late winter and spring to protect fish. Instead, gates may be operated based on evolving water quality conditions and fish migration information, which will enable greater protection against salt water intrusion to the interior portion of the Bay-Delta while protecting fish populations.

~~The CALFED Bay-Delta Program was a collaborative effort among 25 State and federal agencies to improve water supplies in California and the health of the Bay-Delta watershed. On August 28, 2000, the federal government and the State issued a Record of Decision (“ROD”) and related documents approving the final programmatic environmental documentation for the CALFED Bay-Delta Program. The **Environmental Impact Report (“EIR”)** under the California Environmental Quality Act (“CEQA”) was challenged in three separate cases, but ultimately upheld by the California Supreme Court in June 2008.~~

~~The CALFED Bay-Delta Program resulted in an investment of \$3 billion on a variety of projects and programs to begin addressing the Bay-Delta’s water supply, water quality, ecosystem, and levee stability problems. To guide future development of and governance for the CALFED Bay-Delta Program and identify a strategy for managing the Bay-Delta as a sustainable resource, in September 2006, then Governor Schwarzenegger established by Executive Order a Delta Vision process. The Delta Vision process resulted in the creation of a Delta Vision Blue Ribbon Task Force that issued its Delta Vision Strategic Plan (the “Strategic Plan”) on October 17, 2008, providing its recommendations for long-term sustainable management of the Bay-Delta. These recommendations included completing the BDCP and associated environmental assessments to permit ecosystem revitalization and water conveyance improvements, identifying and~~

~~reducing stressors to the Bay-Delta ecosystem, strengthening levees, increasing emergency preparedness, continuing funding for the CALFED ecosystem restoration program, updating Bay-Delta regulatory flow and water quality standards to protect beneficial uses of water and working with the State Legislature (the “Legislature”) on a comprehensive water bond package to fund Bay-Delta infrastructure projects.—~~

~~On November 4, 2009, the Legislature authorized an \$11.1 billion water bond measure that includes over \$2 billion for Bay-Delta ecosystem restoration as well as \$3 billion for new water storage and additional funds for water recycling, drought relief, conservation and watershed protection projects. The bond measure is subject to voter authorization and was scheduled to be included on the November 2010 ballot; however, in August 2010 the Legislature postponed the bond election to 2012 and in July 2012 the Legislature postponed the bond election to November 2014. As of April 23, 2014, new bond legislation has been introduced in the Legislature that would modify or replace the current bond. Metropolitan is not able to assess at this time the likelihood that any bond legislation will pass or the potential impact that any of the introduced bond legislation may have on Metropolitan.—~~

Bay Delta Planning Activities. In 2000, several State and federal agencies released the CALFED Bay Delta Programmatic Record of Decision (“ROD”) and Environmental Impact Report/Environmental Impact Statement (“EIR/EIS”) that outlined a 30-year plan to improve the Delta’s ecosystem, water supply reliability, water quality, and levee stability. The CALFED ROD remains in effect and many of the state, federal, and local projects begun under CALFED continue. However, implementation is now coordinated through the Delta Stewardship Council.

Building on CALFED and other Bay-Delta planning activities, in 2006 multiple State and federal resource agencies, water agencies, and other stakeholder groups entered into a planning agreement for the Bay-Delta Conservation Plan (“BDCP”). The BDCP is being developed as a comprehensive conservation strategy for the Delta designed to restore and protect ecosystem health, water supply, and water quality within a stable regulatory framework. The BDCP would result in long-term permits from regulatory agencies in return for meeting the Bay-Delta’s ecological needs. Implementation of the BDCP would occur over a 50-year time frame. The BDCP is intended to create a durable regulatory framework that would allow for fundamental and systematic improvements to water supply reliability and the Delta’s ecosystem health.

The draft BDCP, draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) and draft Implementing Agreement were made available for public review and comment in December 2013. A supplemental draft EIR/EIS is currently being prepared and will be released for public review in spring 2015.

~~Delaying the bond election did not impact other parts of the 2009 water legislation. Related legislation created a new oversight council for the Bay-Delta, the Delta Stewardship Council, and directs that the Bay-Delta be managed with dual~~The Sacramento-San Joaquin Delta Reform Act (“Reform Act”), passed in 2009, made it state policy to manage the Delta in support of the coequal goals of water supply reliability and ecosystem protection, sets a statewide conservation target for urban per capita water use of 20 percent reductions by 2020 (with credits for existing conservation), provides funding for increased enforcement of illegal water diversions and establishes a statewide groundwater monitoring program restoration in a manner that acknowledges the evolving nature of the Bay-Delta as a place for people and communities. The Reform Act created the Delta Stewardship Council, formed on February 3, 2010, is CALFED’s successor agency and was directed to adopt and oversee implementation of and empowered it to develop a comprehensive management plan for (the “Delta Plan”). State and local agencies proposing certain actions or projects in the Bay-Delta. The are required to certify for the Delta Stewardship Council certified the Program EIR for the Delta Plan and approved the Delta Plan on May 16, 2013, and adopted regulations corresponding to the policies in the Delta Plan on May 17, 2013. that those efforts are consistent with the Delta Plan. The BDCP is intended to be incorporated into the Delta Plan once environmental approvals and requirements are met.

On May 24, 2013, the San Luis & Delta-Mendota Water Authority and Westlands Water District filed litigation in Sacramento Superior Court challenging the adequacy of the Program EIR under CEQA, and

alleged that the Delta Plan is invalid because, among other things, it is inconsistent with the Delta Reform Act of 2009. On June 14, 2013, several different actions were filed challenging the adequacy of the Program EIR under CEQA and alleging that the Delta Plan is invalid. The State Water Contractors, Metropolitan, Alameda County Flood Control and Water Conservation District, Zone 7, Santa Clara Valley Water District, Antelope Valley-East Kern Water Agency, and San Bernardino Valley Municipal Water District filed in Sacramento Superior Court; several environmental interest groups, as well as several fishing industry groups and the Winnemem Wintu Tribe filed in San Francisco Superior Court; and the City of Stockton filed in San Joaquin County Superior Court. On June 17, 2013, Save the California Delta Alliance, as well as the Central Delta Water Agency, South Delta Water Agency, Local Agencies of the North Delta, and others filed in San Francisco Superior Court. The impact, if any, that such litigation might have on Metropolitan's State Water Project supplies cannot be determined at this time. In September 2013, the seven cases were coordinated in Sacramento Superior Court as the Delta Stewardship Council Cases. In March 2014, the court set a schedule for lodging of the administrative record and other pre-trial motions. ~~The next~~ case management conference ~~is scheduled for~~ was held on July 18, 2014. All briefs must be filed by May 21, 2015. No trial date has been set.

On July 25, 2012, Governor Jerry Brown and Secretary of the Interior Ken Salazar announced key proposed elements to advance the BDCP planning process, including north Bay-Delta water diversion facilities with a total capacity of 9,000 cubic-feet per second ("cfs"), two tunnels sized to minimize energy use during operations and a "decision tree" process for unresolved operation criteria such as fall and spring outflows. Preliminary cost estimates for the conveyance portion of this project alternative are approximately \$14 billion. When a decision selecting the final project has been made, costs will be updated and allocated. Metropolitan anticipates that it could bear approximately 25 percent of the costs of the conveyance portion of the project.

Public review drafts of both the BDCP and the BDCP EIR/EIS were released on December 9, 2013. ~~The public comment period will extend from December 13, 2013 to June 13, 2014. However, due in part to the extensive comments received, on August 27, 2014, DWR and the other state and federal agencies leading the BDCP announced that a Recirculated Draft BDCP, EIR/EIS, and Implementing Agreement will be prepared and released in early 2015. The final planning documents are expected to be completed in the fall of 2015.~~ The planning, environmental documentation and preliminary engineering design for the BDCP are being prepared pursuant to the Delta Habitat Conservation and Conveyance Program Memorandum of Agreement ("MOA") and are also scheduled to be completed in ~~2014~~ 2015. The parties to the MOA are DWR, the Bureau of Reclamation, the State and Federal Contractors Water Agency, Metropolitan, Kern County Water Agency, State Water Contractors, San Luis & Delta Mendota Water Authority, Westlands Water District and Santa Clara Valley Water District.

Water Bond. On August 13, 2014, the Legislature authorized a \$7.12 billion water bond measure, replacing the previous water bond authorized in 2009. The bond measure, Proposition 1 was approved by voters on November 4, 2014. Proposition 1 also enacted the Water Quality, Supply, and Infrastructure Improvement Act of 2014. Metropolitan is not able to assess at this time the impact that the water bond or the Water Quality, Supply, and Infrastructure Improvement Act of 2014 may have on Metropolitan.

Sacramento Regional County Sanitation District Litigation. Metropolitan, along with other State and federal water contractors, has urged action to address water quality concerns with respect to both the aquatic health of the Bay-Delta and drinking water quality. On December 9, 2010, the Central Valley Regional Water Quality Control Board ("Regional Board") approved a National Pollutant Discharge Elimination System ("NPDES") permit for the Sacramento Regional County Sanitation District ("Sanitation District") setting water-quality based requirements for the Sanitation District's wastewater treatment plant that will require advanced treatment upgrades for the Sanitation District's wastewater facility. The Sanitation District's treatment plant is the largest wastewater discharger into the Bay-Delta. The treatment plant provides only a secondary level of treatment and discharges nutrients, pathogens, and total organic carbon into the Bay-Delta water supply. The treatment plant's discharge of nitrogen, particularly ammonia, has been

shown to be altering the food chain in the estuary to the detriment of Delta smelt and other native species. The NPDES permit calls for a significant reduction of the nitrogen and particularly ammonia discharge which will require full nitrification and denitrification treatment by 2020, as well as tertiary filtration treatment to meet pathogen removal requirements. The NPDES permit also includes additional permit limits and monitoring requirements for other water quality constituents, including toxic contaminants.

The Sanitation District petitioned the SWRCB for review of the NPDES permit. SWRCB adopted a final order at a December 4, 2012 hearing, which ~~concludes~~concluded the administrative appeal process. The SWRCB's final order ~~rejects~~rejected the Sanitation District's arguments, ~~upholds~~upheld the substantive requirements of the NPDES permit and ~~will impose~~imposed new, more stringent water quality limits. ~~Although~~

~~While~~ the administrative appeal before the SWRCB was ~~then still~~ pending, on December 30, 2011, the Sanitation District filed a lawsuit in Sacramento Superior Court against the Regional Board and SWRCB seeking to overturn and relax the NPDES permit requirements. Metropolitan and other water agencies that participated in the NPDES permitting process intervened ~~in the superior court case~~. On April 29, 2013, in a partial settlement of the litigation, the Sanitation District agreed to drop its challenge of the NPDES permit requirements for ammonia and nitrate removal. As part of the settlement, the Sanitation District will comply with a set of milestones resulting in completion of the construction of treatment facilities necessary for full nitrification and denitrification by 2021. ~~This leaves a cause of action concerning pathogens and~~In early 2014, the parties reached a settlement on the filtration requirements ~~to be litigated. In exchange for dropping the ammonia and nitrate challenge,~~ The settlement still requires the Sanitation District ~~is receiving two additional years to meet~~to implement filtration ~~and disinfection requirements, should those requirements remain following conclusion of the litigation.~~ —, but at a lower hydraulic capacity than originally required.

Implementation of the final settlement of the permit litigation required the Central Valley Regional Water Quality Control Board (the "Regional Board") to issue an amended permit. Following publication of a draft permit, the Regional Board adopted the amended permit on August 8, 2014. In September 2014, the parties to the litigation filed the necessary papers with the court to dismiss the case. Final judgment was entered October 8, 2014 concluding this litigation.

In a related proceeding, in 2005, Metropolitan, other urban State Water Contractor agencies and the Contra Costa Water District—earlier brought a successful CEQA challenge in response to significant, unmitigated water quality impacts that would occur from a planned expansion of the Sanitation District's treatment plant. The Sanitation District appealed the trial court ruling—~~and the case remains pending in the Third District Court of Appeal awaiting oral argument.~~ In January 2013, the Court of Appeal dismissed the appeal as moot, based on the Sanitation District's representation that the expansion project is no longer planned. That left attorneys' fees for Metropolitan and the other prevailing parties as the only remaining issue in this CEQA case. In September 2014, the parties to the CEQA case reached agreement to settle the attorney fee issue. The settlement calls for the Sanitation District to accelerate completion of a planned treatment component in order to begin nutrient removal two years ahead of the permit compliance date.

California Water Impact Network Litigation. On September 3, 2010, the California Water Impact Network and two other non-profit organizations filed a petition for writ of mandate and for declaratory and injunctive relief in Sacramento Superior Court against the SWRCB and DWR. The petition alleges that by permitting and carrying out the export of large volumes of water from the Delta through the State Water Project, the SWRCB and DWR have failed to protect public trust fishery resources in the Delta; have been diverting water from the Bay-Delta wastefully and unreasonably in violation of the prohibition against waste and unreasonable use in the California Constitution; and have failed to enforce and comply with water quality and beneficial use standards in D-1641, the 1995 SWRCB Water Quality Control Plan, and the Porter-Cologne Act. Among the relief sought in the petition is an injunction against Bay-Delta exports by the State Water Project pending compliance with the various laws and administrative orders that are alleged to have been violated. The State Water Contractors filed a motion to intervene in this action, which was

granted on March 25, 2011. The court has ordered the plaintiffs to include the Bureau of Reclamation as a party. In response, the Bureau of Reclamation has asserted that federal sovereign immunity bars their inclusion in the state court action. If the court determines that the Bureau of Reclamation is an indispensable party, the lawsuit, or portions of it, may be dismissed.

Monterey Agreement Litigation. On September 15, 2000, the Third District Court of Appeal for the State of California issued its decision in *Planning and Conservation League; Citizens Planning Association of Santa Barbara County and Plumas County Flood Control District v. California Department of Water Resources and Central Coast Water Authority*. This case was an appeal of a challenge to the adequacy of the environmental documentation prepared with respect to certain amendments to the State Water Contract (the “Monterey Agreement”) which reflects the settlement of certain disputes regarding the allocation of State Water Project water. The Court of Appeal held that the environmental documentation was defective in failing to analyze the environmental effects of the Monterey Agreement’s elimination of the permanent shortage provisions of the State Water Contract. The parties negotiated a settlement agreement in the fall of 2002, which allows continued operation of the State Water Project under the Monterey Agreement principles while a new EIR was prepared. DWR completed the final EIR and concluded the remedial CEQA review for the ~~project~~[Monterey Agreement](#) on May 4, 2010.

Following DWR’s completion of the EIR, three new lawsuits were filed challenging the project. Central Delta Water Agency, South Delta Water Agency, California Water Impact Network, California Sportfishing Protection Alliance, and the Center For Biological Diversity filed a lawsuit against DWR in Sacramento County Superior Court challenging the validity of the EIR under CEQA and the validity of underlying agreements under a reverse validation action (the “*Central Delta I*” case). These same plaintiffs filed a reverse validation lawsuit against the Kern County Water Agency in Kern County Superior Court (“*Central Delta II*”). This lawsuit targets a transfer of land from Kern County Water Agency to the Kern Water Bank, which was completed as part of the original Monterey ~~Amendments~~[Agreement](#). The third lawsuit is an EIR challenge brought by Rosedale-Rio Bravo Water Storage District and Buena Vista Water Storage District against DWR in Kern County Superior Court (“*Rosedale*”). The two Kern County cases were transferred to Sacramento Superior Court and the three cases ~~were~~ consolidated for trial. The *Central Delta II* case was stayed pending resolution of the *Central Delta I* case.

In January 2013, the Court ruled that the validation cause of action in *Central Delta I* was time barred by the statute of limitations. On March 5, 2014 the Court issued its ~~decision~~[decisions on the EIR challenges](#) in *Central Delta I* and *Rosedale*. ~~In *Central Delta I* the Court ruled that DWR violated CEQA in that the EIR fails to adequately describe, analyze, and mitigate the potential impacts associated with the Kern Water Bank. The court, therefore, granted the petition~~[The Court granted the petitions](#) for writ of mandate. ~~In *Rosedale*, the Court ruled, holding that DWR violated CEQA in the preparation of the EIR because the EIR fails~~[failed](#) to adequately describe, analyze, and mitigate the potential impacts ~~of the project~~ associated with the Kern Water Bank, ~~particularly as to potential groundwater and water quality impacts. The court, therefore, granted the petition for writ of mandate. In both rulings, the court directed the petitioners to notice a hearing to discuss an appropriate remedy for the CEQA violation. Deciding upon a remedy for the defect in the EIR regarding analysis of~~[On October 2, 2014, the court issued its final rulings in *Central Delta I* and *Rosedale*, holding that DWR must complete a limited scope remedial CEQA review addressing the potential impacts of the Kern Water Bank. It also allows operation of the Kern Water Bank is the next step in the litigation](#)[State Water Project to continue under the terms of the Monterey Agreement while the remedial CEQA review is prepared. And importantly, the ruling leaves in place the underlying project approvals while DWR prepares the remedial CEQA review.](#)

[The final step for these cases in the trial court is entry of judgment and a writ ordering DWR to decertify the current EIR and prepare the remedial review. Any appeal must be filed 60 days after the entry of judgment. Upon entry of judgment in *Central Delta I*, the stay will lift in *Central Delta II* and it is anticipated that the court will then establish a schedule for resolving the *Central Delta II* case. Any adverse](#)

impact of this litigation and ruling on Metropolitan’s State Water Project supplies cannot be determined at this time.

Colorado River Aqueduct

General. The Colorado River was Metropolitan’s original source of water after Metropolitan’s establishment in 1928. Metropolitan has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. Water from the Colorado River and its tributaries is also available to other users in California, as well as users in the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming (the “Colorado River Basin States”), resulting in both competition and the need for cooperation among these holders of Colorado River entitlements. In addition, under a 1944 treaty, Mexico has an allotment of 1.5 million acre-feet of Colorado River water annually except in the event of extraordinary drought or serious accident to the delivery system in the United States, in which event the water allotted to Mexico would be curtailed. Mexico also can schedule delivery of an additional 200,000 acre-feet of Colorado River water per year if water is available in excess of the requirements in the United States and the 1.5 million acre-feet allotted to Mexico.

The Colorado River Aqueduct, which is owned and operated by Metropolitan, transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County. After deducting for conveyance losses and considering maintenance requirements, up to 1.25 million acre-feet of water a year may be conveyed through the Colorado River Aqueduct to Metropolitan’s member agencies, subject to availability of Colorado River water for delivery to Metropolitan as described below.

California is apportioned the use of 4.4 million acre-feet of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California and Nevada. In addition, California has historically been allowed to use Colorado River water apportioned to but not used by Arizona or Nevada when such supplies have been requested for use in California. Under the 1931 priority system that has formed the basis for the distribution of Colorado River water made available to California, Metropolitan holds the fourth priority right to 550,000 acre-feet per year. This is the last priority within California’s basic apportionment. In addition, Metropolitan holds the fifth priority right to 662,000 acre-feet of water, which is in excess of California’s basic apportionment. See the table “PRIORITIES UNDER THE 1931 CALIFORNIA SEVEN-PARTY AGREEMENT” below. Until 2003, Metropolitan had been able to take full advantage of its fifth priority right as a result of the availability of surplus water and apportioned but unused water. However, during the 1990s Arizona and Nevada increased their use of water from the Colorado River, utilizing their respective basic apportionments by 2002 and significantly reducing unused apportionment available for California. In addition, a severe drought in the Colorado River Basin reduced storage in system reservoirs, such that Metropolitan stopped taking surplus deliveries in 2003 in an effort to mitigate the effects of the drought. Prior to 2003, Metropolitan could divert over 1.2 million acre-feet in any year, but since that time, Metropolitan’s net diversions of Colorado River water have ~~been limited to~~ ranged from a low of nearly 633,000 acre-feet in 2006 ~~and to~~ a high of 1,105,232 acre-feet in 2009. Average annual net deliveries for 2003 through 2013 were approximately 838,000 acre-feet, with annual volumes dependent primarily on programs to augment supplies, including transfers of conserved water from agriculture. Metropolitan’s Colorado River supply was ~~nearly 1,012,000~~ 1,012,715 acre-feet in 2013. See “—*Quantification Settlement Agreement*” and “—*Interim Surplus Guidelines*” below.

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PRIORITIES UNDER THE 1931 CALIFORNIA SEVEN-PARTY AGREEMENT⁽¹⁾

Priority	Description	Acre-Feet Annually
1	Palo Verde Irrigation District gross area of 104,500 acres of land in the Palo Verde Valley	
2	Yuma Project in California not exceeding a gross area of 25,000 acres in California	3,850,000
3(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys ⁽²⁾ to be served by All-American Canal	
3(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	
4	Metropolitan Water District of Southern California for use on the coastal plain	550,000
	SUBTOTAL	4,400,000
5(a)	Metropolitan Water District of Southern California for use on the coastal plain	550,000
5(b)	Metropolitan Water District of Southern California for use on the coastal plain ⁽³⁾	112,000
6(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys to be served by the All-American Canal	
6(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	300,000
	TOTAL	5,362,000
7	Agricultural use in the Colorado River Basin in California	Remaining surplus

Source: Metropolitan.

- (1) Agreement dated August 18, 1931, among Palo Verde Irrigation District, Imperial Irrigation District, Coachella Valley County Water District, Metropolitan, the City of Los Angeles, the City of San Diego and the County of San Diego. These priorities were memorialized in the agencies' respective water delivery contracts with the Secretary of the Interior.
- (2) The Coachella Valley Water District serves Coachella Valley.
- (3) In 1946, the City of San Diego, the San Diego County Water Authority, Metropolitan and the Secretary of the Interior entered into a contract that merged and added the City and County of San Diego's rights to storage and delivery of Colorado River water to the rights of Metropolitan.

Metropolitan has taken steps to augment its share of Colorado River water through agreements with other agencies that have rights to use such water. Under a 1988 water conservation agreement (the "1988 Conservation Agreement") between Metropolitan and the Imperial Irrigation District ("IID"), Metropolitan provided funding for IID to construct and operate a number of conservation projects that are currently conserving up to 105,000 acre-feet of water per year that is provided to Metropolitan. Under the October 2003 Quantification Settlement Agreement and related agreements, Metropolitan, at the request of Coachella Valley Water District ("CVWD"), forgoes up to 20,000 acre-feet of this water each year for diversion by CVWD. See "*Quantification Settlement Agreement*" below. In ~~2011~~2012 and ~~2012~~2013 CVWD's requests were for ~~4,000 and~~ 10,463 and 6,693 acre-feet respectively, leaving ~~99,940 acre-feet in 2011 and~~ 93,677 acre-feet in 2012 and ~~98,307 acre-feet in 2013~~ for Metropolitan. In 1992, Metropolitan entered into an

agreement with the Central Arizona Water Conservation District (“CAWCD”) to demonstrate the feasibility of CAWCD storing Colorado River water in central Arizona for the benefit of an entity outside of the State of Arizona. Pursuant to this agreement, CAWCD created 80,909 acre-feet of long-term storage credits that, under the agreement as amended, were recovered and delivered to Metropolitan between 2007 and 2010.

Metropolitan and the Palo Verde Irrigation District (“PVID”) signed the program agreement for a Land Management, Crop Rotation and Water Supply Program in August 2004. This program provides up to 133,000 acre-feet of water to be available to Metropolitan in certain years. The term of the program is 35 years. Fallowing began on January 1, 2005. In March 2009, Metropolitan and PVID entered into a supplemental fallowing program within PVID that provided for the fallowing of additional acreage in 2009 and 2010. In calendar years 2009 and 2010, respectively, 24,100 acre-feet and 32,300 acre-feet of water were saved and made available to Metropolitan under the supplemental program. The following table shows annual volumes of water saved and made available to Metropolitan:

WATER AVAILABLE FROM PVID LAND MANAGEMENT, CROP ROTATION AND WATER SUPPLY PROGRAM

<u>Calendar Year</u>	<u>Volume (acre-feet)</u>
2005	108,700
2006	105,000
2007	72,300
2008	94,300
2009*	144,300
2010*	148,600
2011	122,200
2012	73,700
2013	31,400
	<u>32,750</u>

Source: Metropolitan.

* Includes water from the supplemental fallowing program that provided for fallowing of additional acreage in 2009 and 2010.

In May 2008, Metropolitan provided \$28.7 million to join the CAWCD and the Southern Nevada Water Authority (“SNWA”) in funding the Bureau of Reclamation’s construction of an 8,000 acre-foot off-stream regulating reservoir near Drop 2 of the All-American Canal in Imperial County (officially renamed the Warren H. Brock Reservoir). Construction was completed in October 2010. The Warren H. Brock Reservoir conserves about 70,000 acre-feet of water per year by capturing and storing otherwise non-storable water flow. The Bureau of Reclamation has refunded to Metropolitan \$2.64 million in unused contingency funds. In return for its funding, Metropolitan received 100,000 acre-feet of water that was stored in Lake Mead, with the ability to deliver up to 40,000 acre-feet of the water which has not yet been used in any one year. Besides the additional water supply, the new reservoir adds to the flexibility of Colorado River operations.

In September 2009, Metropolitan authorized participation with SNWA, the Colorado River Commission of Nevada, the CAWCD and the Bureau of Reclamation in the pilot operation of the Yuma Desalting Plant. The Bureau of Reclamation concluded the pilot operation of the Yuma Desalting Plant in March 2011. Metropolitan’s contribution for the funding agreement was \$8,395,313, of which \$1,087,687 was refunded to Metropolitan. Metropolitan’s yield from the pilot run of the project was 24,397 acre-feet.

In November 2012, Metropolitan executed agreements in support of a program to augment Metropolitan’s Colorado River supply from 2013 through 2017 through an international pilot project in Mexico. Metropolitan’s total share of costs will be \$5 million for 47,500 acre-feet of project supplies. The

costs will be paid between 2014 and 2017, and the conserved water will be credited to Metropolitan’s intentionally-created surplus water account no later than 2017. See “— *Intentionally-Created Surplus Program*” below. In December 2013, Metropolitan and IID executed an agreement under which IID will pay half of Metropolitan’s program costs, or \$2.5 million, in return for half of the project supplies, or 23,750 acre-feet.

Quantification Settlement Agreement. The Quantification Settlement Agreement (“QSA”), executed by CVWD, IID and Metropolitan in October 2003, establishes Colorado River water use limits for IID and CVWD, provides for specific acquisitions of conserved water and water supply arrangements for up to 75 years, and restored the opportunity for Metropolitan to receive any “special surplus water” under the Interim Surplus Guidelines. See “—*Interim Surplus Guidelines*” below. The QSA also allows Metropolitan to enter into other cooperative Colorado River supply programs. Related agreements modify existing conservation and cooperative water supply agreements consistent with the QSA, and set aside several disputes among California’s Colorado River water agencies.

Specific programs under the QSA include lining portions of the All-American and Coachella Canals, which conserve approximately 96,000 acre-feet annually. As a result, about 80,000 acre-feet of conserved water is delivered to the San Diego County Water Authority (“SDCWA”) by exchange with Metropolitan. Metropolitan also takes delivery of 16,000 acre-feet annually that will be made available for the benefit of the La Jolla, Pala, Pauma, Rincon and San Pasqual Bands of Mission Indians, the San Luis Rey River Indian Water Authority, the City of Escondido and the Vista Irrigation District, upon completion of a water rights settlement. An amendment to the 1988 Conservation Agreement between Metropolitan and IID and an associated 1989 Approval Agreement among Metropolitan, IID, CVWD and PVID, extended the term of the 1988 Conservation Agreement and limited the single year amount of water used by CVWD to 20,000 acre-feet. Also included under the QSA is the Delivery and Exchange Agreement between Metropolitan and CVWD that provides for Metropolitan to deliver annually up to 35,000 acre-feet of Metropolitan’s State Water Project contractual water to CVWD by exchange with Metropolitan’s available Colorado River supplies. In calendar year 2011, under a supplemental agreement with CVWD, Metropolitan delivered 105,000 acre-feet, which consisted of the full 35,000 acre-feet for 2011 plus advance delivery of the full contractual amounts for 2012 and 2013. In 2013, Metropolitan entered into a second supplemental agreement with CVWD. Under this agreement, Metropolitan delivered to CVWD 2,508 acre-feet of water in 2013 that would otherwise have been available in 2014. In return, CVWD reduced its 2012 Colorado River water order by 9,537 acre-feet and allowed Metropolitan to use that water conserved by IID. In 2021, the transfer of water conserved annually by IID to SDCWA is expected to reach 205,000 acre-feet. See description below under the caption “—*Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*”; see also “METROPOLITAN REVENUES—Principal Customers” in this Appendix A. With full implementation of the programs identified in the QSA, at times when California is limited to its basic apportionment of 4.4 million acre-feet per year, Metropolitan expects to be able to annually divert to its service area approximately 850,000 acre-feet of Colorado River water plus water from other water augmentation programs it develops, including the PVID program, which provides up to approximately 130,000 acre-feet of water per year. (Amounts of Colorado River water received by Metropolitan in 2003 through 2013 are discussed under the heading “—Colorado River Aqueduct—*General*” above.)

A complicating factor in completing the QSA was the fate of the Salton Sea, an important habitat for a wide variety of fish-eating birds as a stopover spot along the Pacific flyway. Some of these birds are listed as threatened or endangered species under the California and Federal ESAs. Located at the lowest elevations of an inland basin and fed primarily by agricultural drainage with no outflows other than evaporation, the Salton Sea is trending towards hyper-salinity, which has already impacted the Salton Sea’s fishery. Without mitigation, the transfer of water from IID to SDCWA, one of the core programs implemented under the QSA, would reduce the volume of agricultural drainage from IID’s service area into the Salton Sea, which in turn would accelerate this natural trend of the Salton Sea to hyper-salinity. See “—*Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*” below. In passing legislation to implement the QSA, the Legislature committed the State to undertake restoration of the Salton Sea ecosystem. Restoration

of the Salton Sea is subject to selection and approval of an alternative by the Legislature and funding of the associated capital improvements and operating costs. The Secretary for the California Natural Resources Agency submitted an \$8.9-billion preferred alternative for restoration of the Salton Sea to the Legislature in May 2007. While withholding authorization of the preferred alternative, the Legislature has appropriated funds from Proposition 84 to undertake demonstration projects and investigations called for in the Secretary's recommendation. On September 25, 2010, then-Governor Schwarzenegger signed Senate Bill 51, establishing the "Salton Sea Restoration Council" as a state agency in the Natural Resources Agency to oversee restoration of the Salton Sea. The council was directed to evaluate alternative Salton Sea restoration plans and to report to the Governor and the Legislature by June 30, 2013 with a recommended plan. However, Governor Brown's 2012 Reorganization Plan, as modified by budget trailer bill SB 1018 (Leno), Chapter 39, Statutes of 2012, effective December 31, 2012, eliminated the council before it ever met. The QSA implementing legislation also established the Salton Sea Restoration Fund, to be funded in part by payments made by the parties to the QSA and fees on certain water transfers among the parties to the QSA. Under the QSA agreements Metropolitan agreed to pay \$20 per acre-foot into the Salton Sea Restoration Fund for any special surplus Colorado River water that Metropolitan elects to take under the Interim Surplus Guidelines, if available. Metropolitan also agreed to acquire up to 1.6 million acre-feet of water conserved by IID, excluding water transferred from IID to SDCWA (see "*Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*" below), if such water can be transferred consistent with plans for Salton Sea restoration, at an acquisition price of \$250 per acre-foot (in 2003 dollars), with net proceeds to be deposited into the Salton Sea Restoration Fund. No conserved water has been made available to Metropolitan under this program. As part of an effort to mitigate the effects of the drought in the Colorado River Basin that began in 2000, Metropolitan elected not to take delivery of special surplus Colorado River water that was available from October 2003 through 2004 and from 2006 through 2007. No special surplus water has been available since 2007. Metropolitan may receive credit for the special surplus water payments against future contributions for the Lower Colorado River Multi-Species Conservation Program (see "*Environmental Considerations*" below). In consideration of these agreements, Metropolitan will not have or incur any liability for restoration of the Salton Sea.

Sale of Water by the Imperial Irrigation District to San Diego County Water Authority. On April 29, 1998, SDCWA and IID executed an agreement (the "Transfer Agreement") for SDCWA's purchase from IID of Colorado River water that is conserved within IID. An amended Transfer Agreement, executed as one of the QSA agreements, set the maximum transfer amount at 205,000 acre-feet in 2021, with the transfer gradually ramping up to that amount over an approximately twenty-year period, stabilizing at 200,000 acre-feet per year beginning in 2023.

No facilities exist to deliver water directly from IID to SDCWA. Accordingly, Metropolitan and SDCWA entered into an exchange contract, pursuant to which SDCWA makes available to Metropolitan at its intake at Lake Havasu on the Colorado River the conserved Colorado River water acquired by SDCWA from IID and water allocated to SDCWA that has been conserved as a result of the lining of the All-American and Coachella Canals. See "*Quantification Settlement Agreement*" above. Metropolitan delivers an equal volume of water from its own sources of supply through portions of its delivery system to SDCWA. The deliveries to both Metropolitan and SDCWA are deemed to be made in equal monthly increments. In consideration for the conserved water made available to Metropolitan by SDCWA, a lower rate is paid by SDCWA for the exchange water delivered by Metropolitan. The price payable by SDCWA is calculated using the charges set by Metropolitan's Board from time to time to be paid by its member agencies for the conveyance of water through Metropolitan's facilities. See "METROPOLITAN REVENUES—Wheeling and Exchange Charges" and "—Litigation Challenging Rate Structure" in this Appendix A for a description of Metropolitan's charges for the conveyance of water through Metropolitan's facilities and litigation in which SDCWA and IID are challenging such charges. In 2011, 143,243 acre-feet were delivered by SDCWA for exchange, consisting of 63,278 acre-feet of IID conservation plus 79,965 acre-feet of conserved water from the Coachella Canal and All-American Canal lining projects. In 2012, 186,861 acre-feet were delivered by SDCWA for exchange, consisting of 106,722 acre-feet of IID conservation plus 80,139 acre-feet of conserved water from the Coachella Canal and All-American Canal

lining projects. [In 2013, 180,256 acre-feet were delivered by SDCWA for exchange, consisting of 100,000 acre-feet of IID conservation plus 80,256 acre-feet of conserved water from the Coachella Canal and All-American Canal lining projects.](#)

The QSA agreements provided for delivery of 80,000 acre-feet of water conserved by IID in 2011. The delivery of conserved water fell short by 16,722 acre-feet. In accordance with the terms of the exchange contract, Metropolitan served SDCWA with a Notice of Default. The exchange contract provides that SDCWA will pay the lower water rate based on deliveries of exchange water that match the volume of conserved water made available by IID in each calendar year. Metropolitan invoiced SDCWA for its higher water rate on the 16,722 acre-feet of additional non-exchange water delivered in 2011. SDCWA paid this invoice under protest. Metropolitan agreed to exchange with SDCWA up to an additional 16,722 acre-feet in 2012 if IID delivered that volume of conserved water after meeting its 2012 obligation of 90,000 acre-feet. IID was able to obtain and deliver the additional 16,722 acre-feet by reducing its use of Colorado River water and Metropolitan credited back to SDCWA the amount paid under protest.

QSA Related Litigation - State Court. On November 5, 2003, IID filed a validation action in Imperial County Superior Court, seeking a judicial determination that thirteen agreements associated with the IID/SDCWA water transfer and the QSA are valid, legal and binding. Other lawsuits also were filed contemporaneously challenging the execution, approval and implementation of the QSA on various grounds. All of the QSA cases were coordinated in Sacramento Superior Court. Between early 2004 and late 2009, a number of pre-trial challenges and dispositive motions were filed by the parties and ruled on by the court, which reduced the number of active cases and narrowed the issues for trial, the first phase of which began on November 9, 2009 and concluded on December 2, 2009. One of the key issues in this first phase was the constitutionality of the QSA Joint Powers Agreement, pursuant to which IID, CVWD and SDCWA agreed to commit \$163 million toward certain mitigation and restoration costs associated with implementation of the QSA and related agreements, and the State agreed to be responsible for any costs exceeding this amount. A final judgment was issued on February 11, 2010, in which the trial court held that the State's commitment was unconditional in nature and, as such, violated the appropriation requirement and debt limitation under the California Constitution. The trial court also invalidated eleven other agreements, including the QSA, because they were inextricably interrelated with the QSA Joint Powers Agreement. Lastly, the trial court ruled that all other claims raised by the parties, including CEQA claims related to the QSA Programmatic EIR and the IID Transfer Project EIR, are moot.

In March 2010, Metropolitan, IID, CVWD, SDCWA, the State and others filed notices of appeal challenging various aspects of the trial court's ruling. On December 7, 2011, the court of appeal issued its ruling reversing, in part, the trial court's ruling. In particular, the court of appeal held that while the State's commitment to fund mitigation costs in excess of \$163 million was unconditional, actual payment of such costs was subject to a valid appropriation by the Legislature, as required under the California Constitution. Moreover, the State's commitment did not create a present debt in excess of the State Constitution's \$300,000 debt limit. Thus, the QSA Joint Powers Agreement was held to be constitutional. The court of appeal also rejected other challenges to this agreement, including that it was beyond the State's authority, there was no "meeting of the minds," and there was a conflict of interest. In light of its ruling, the court of appeal remanded the matter back to the trial court for further proceedings on the claims that had been previously dismissed as moot. A two-day bench trial was held on November 13, 2012. On June 4, 2013 the trial court issued its ruling, holding that IID had acted within its authority in executing these agreements and had complied with all substantive and procedural requirements imposed under State law. In addition, the court held that the environmental reviews conducted in support of the QSA and related agreements complied with CEQA and its implementing regulations in all respects. In short, the trial court rejected all of the claims asserted by opponents of the QSA. Parties challenging the QSA appealed and agencies supporting the QSA filed a cross-appeal.

Briefing [by the parties to the appeals and cross-appeals](#) was completed in ~~April 2014, however the court has not set a hearing date~~ August 2014. [The court of appeal subsequently accepted a settlement](#)

agreement and issued an order dismissing three parties from further proceedings. As a result, the only remaining QSA opponents involved in the state appellate proceeding are the County of Imperial and the Imperial County Air Pollution Control District. No date for oral argument has been set. The impact that this litigation might have on Metropolitan's water supplies cannot be adequately determined at this time.

QSA Related Litigation - Federal Court. On January 28, 2010, Metropolitan was served with a federal complaint filed by the County of Imperial and the Imperial County Air Pollution Control District alleging that execution and implementation of three QSA-related agreements violate NEPA and the federal Clean Air Act. The complaint named the Department of the Interior, Secretary of the Interior, Bureau of Reclamation and Commissioner of Reclamation as defendants, and Metropolitan, CVWD, IID and SDCWA as real parties in interest. With respect to NEPA, the complaint alleged that the environmental impact statement prepared by the Bureau of Reclamation: failed to adequately analyze potential impacts on the Salton Sea and on land use, growth and socioeconomics; improperly segmented various project components; failed to address cumulative impacts; and failed to address mitigation of potential impacts. With respect to the Clean Air Act, the complaint alleged that the Bureau of Reclamation failed to conduct a conformity analysis as required under the Act and Imperial County Air Pollution Control District's own rules. On April 6, 2012, the court ruled against the plaintiffs and in favor of the defendants on all claims. The court held that the plaintiffs lacked standing to pursue NEPA and Clean Air Act claims and that the NEPA claims lacked merit. On May 4, 2012, the plaintiffs filed a notice of appeal. On May 22, 2012, the non federal defendants filed a notice of cross appeal. Briefing has been completed, oral argument was heard by the Ninth Circuit Court of Appeals on December 4, 2013, and a ruling is expected in 2014.19, 2014, the Ninth Circuit ruled in favor of the defendants. The court held that the plaintiffs had standing to assert these claims, but that no violation of either NEPA or the Clean Air Act had occurred. On August 1, 2014, the court denied the plaintiffs' petition for rehearing and rejected their petition for rehearing en banc.

Navajo Nation Litigation. The Navajo Nation filed litigation against the Department of the Interior, specifically the Bureau of Reclamation and the Bureau of Indian Affairs, in 2003, alleging that the Bureau of Reclamation has failed to determine the extent and quantity of the water rights of the Navajo Nation in the Colorado River and that the Bureau of Indian Affairs has failed to otherwise protect the interests of the Navajo Nation. The complaint challenges the adequacy of the environmental review for the Interim Surplus Guidelines (as defined under "—Interim Surplus Guidelines" below) and seeks to prohibit the Department of the Interior from allocating any "surplus" water until such time as a determination of the rights of the Navajo Nation is completed. Metropolitan and other California water agencies filed motions to intervene in this action. In October 2004 the court granted the motions to intervene and stayed the litigation to allow negotiations among the Navajo Nation, federal defendants, CAWCD, State of Arizona and Arizona Department of Water Resources. After years of negotiations, a tentative settlement was proposed in 2012 that would provide the Navajo Nation with specified rights to water from the Little Colorado River and groundwater basins under the reservation, along with federal funding for development of water supply systems on the tribe's reservation. The proposed agreement was rejected by tribal councils for both the Navajo and the Hopi, who are now seeking to intervene. On May 16, 2013, the stay of proceedings was lifted. On June 3, 2013, the Navajo Nation ~~filed~~moved for leave to file a first amended complaint, which the court granted on June 27, 2013. The amended complaint ~~adds~~added a legal challenge to ~~guidelines~~the Lower Basin Shortage Guidelines adopted by the Secretary of the Interior in 2007 that allow Metropolitan and other Colorado River water users to store water in Lake Mead. Metropolitan has used these new guidelines to store over 500,000 acre-feet of water in Lake Mead that may be delivered at Metropolitan's request in future years. ~~The federal defendants and each of the intervenors, including Metropolitan, filed motions to dismiss the lawsuit. Briefing on the motions was completed in December 2013, and the parties are awaiting the court's ruling. Metropolitan will continue to defend its rights in the litigation. At this time, the impact of the litigation, if any, on Metropolitan cannot be determined.~~See "—"Intentionally-Created Surplus Program" below. On July 22, 2014, the district court dismissed the lawsuit in its entirety, ruling that the Navajo Nation lacked standing and that the claim was barred against the federal defendants. The district court denied a motion by the Navajo Nation for leave to amend the complaint further after the dismissal. The Navajo Nation filed notice of intent to appeal the decision on September 19, 2014 from the dismissal of its claims

related to the Interim Surplus Guidelines, the Lower Basin Shortage Guidelines, and breach of the federal trust obligation to the tribe. Metropolitan is unable to assess at this time the likelihood of success of this appeal or any future claims, or their potential effect on Colorado River water supplies.

Interim Surplus Guidelines. In January 2001, the Secretary of the Interior adopted guidelines (the “Interim Surplus Guidelines”) for use through 2016 in determining if there is surplus Colorado River water available for use in California, Arizona and Nevada. The purpose of the Interim Surplus Guidelines is to provide a greater degree of predictability with respect to the availability and quantity of surplus water through 2016. The Interim Surplus Guidelines were amended in 2007 and now extend through 2026 (see “—*Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead*” below). The Interim Surplus Guidelines contain a series of benchmarks for reductions in agricultural use of Colorado River water within California by set dates.

Under the Interim Surplus Guidelines, Metropolitan initially expected to divert up to 1.25 million acre-feet of Colorado River water annually under foreseeable runoff and reservoir storage scenarios from 2004 through 2016. However, an extended drought in the Colorado River Basin reduced these initial expectations. On May 16, 2002 SNWA and Metropolitan entered into an Agreement Relating to Implementation of Interim Colorado River Surplus Guidelines, in which SNWA and Metropolitan agreed to the allocation of unused apportionment as provided in the Interim Surplus Guidelines and on the priority of SNWA for interstate banking of water in Arizona. SNWA and Metropolitan entered into a storage and interstate release agreement on October 21, 2004. Under this program, SNWA can request that Metropolitan store unused Nevada apportionment in California. The amount of water stored through 2013 under this agreement is approximately 160,000 acre-feet. In subsequent years, SNWA may request recovery of this stored water. As part of a 2012 executed amendment, it is expected that SNWA will not request return of this water before 2022. The stored water provides flexibility to Metropolitan for blending Colorado River water with State Water Project water and improves near-term water supply reliability.

Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead. In November 2007, the Bureau of Reclamation issued a Final Environmental Impact Statement (“EIS”) regarding new federal guidelines concerning the operation of the Colorado River system reservoirs. These new guidelines provide water release criteria from Lake Powell and water storage and water release criteria from Lake Mead during shortage and surplus conditions in the Lower Basin, provide a mechanism for the storage and delivery of conserved system and non-system water in Lake Mead and extend the Interim Surplus Guidelines through 2026. The Secretary of the Interior issued the final guidelines through a Record of Decision signed in December 2007. The Record of Decision and accompanying agreement among the Colorado River Basin States protect reservoir levels by reducing deliveries during drought periods, encourage agencies to develop conservation programs and allow the Colorado River Basin States to develop and store new water supplies. The Colorado River Basin Project Act of 1968 insulates California from shortages in all but the most extreme hydrologic conditions.

Intentionally-Created Surplus Program. Metropolitan and the Bureau of Reclamation executed an agreement on May 26, 2006 for a demonstration program that allowed Metropolitan to leave conserved water in Lake Mead that Metropolitan would otherwise have used in 2006 and 2007. Only “intentionally-created surplus” water (water that has been conserved through an extraordinary conservation measure, such as land fallowing) was eligible for storage in Lake Mead under this program. See the table “Metropolitan’s Water Storage Capacity and Water in Storage” under the heading “—Storage Capacity and Water in Storage” below. Metropolitan may store additional intentionally-created surplus water in Lake Mead under the federal guidelines for operation of the Colorado River system reservoirs described above under the heading “*Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead.*” The Secretary of the Interior will deliver intentionally-created surplus water to Metropolitan in accordance with the terms of a December 13, 2007 Delivery Agreement between the United States and Metropolitan. As of

January 2013, Metropolitan had approximately 580,000 acre-feet in its intentionally-created surplus accounts. These surplus accounts are made up of water conserved by fallowing in the Palo Verde Valley, projects implemented with IID in its service area, and desalination, specifically the ~~Drop 2~~ Warren H. Brock Reservoir Project and the Yuma Desalting Plant pilot run. Metropolitan stored nearly 161,000 acre-feet of intentionally-created surplus water in 2012 and took delivery of ~~an estimated 84,000~~ 93,857 acre-feet in 2013.

Environmental Considerations. Federal and state environmental laws protecting fish species and other wildlife species have the potential to affect Colorado River operations. A number of species that are on either “endangered” or “threatened” lists under the ESAs are present in the area of the Lower Colorado River, including among others, the bonytail chub, razorback sucker, southwestern willow flycatcher and Yuma clapper rail. To address this issue, a broad-based state/federal/tribal/private regional partnership that includes water, hydroelectric power and wildlife management agencies in Arizona, California and Nevada have developed a multi-species conservation program for the main stem of the Lower Colorado River (the Lower Colorado River Multi-Species Conservation Program or “MSCP”). The MSCP allows Metropolitan to obtain federal and state permits for any incidental take of protected species resulting from current and future water and power operations of its Colorado River facilities and to minimize any uncertainty from additional listings of endangered species. The MSCP also covers operations of federal dams and power plants on the river that deliver water and hydroelectric power for use by Metropolitan and other agencies. The MSCP covers 27 species and habitat in the Lower Colorado River from Lake Mead to the Mexican border for a term of 50 years. Over the 50 year term of the program, the total cost to Metropolitan will be about \$88.5 million (in 2003 dollars), and annual costs will range between \$0.8 million and \$4.7 million (in 2003 dollars).

Quagga Mussel Control Program. In January 2007 quagga mussels were discovered in Lake Mead. Quagga mussels can reproduce quickly and, if left unmanaged, can clog intakes and raw water conveyance systems, alter or destroy fish habitats and affect lakes and beaches. Quagga mussels were introduced in the Great Lakes in the late 1980s. These organisms infest much of the Great Lakes basin, the St. Lawrence Seaway, and much of the Mississippi River drainage system. The most likely source of the quagga mussel infestation in the Colorado River is recreational boats with exposure to water bodies around the Great Lakes. Metropolitan developed a program in 2007 to address the long term introduction of mussel larvae into the Colorado River Aqueduct from the Lower Colorado River, which is now heavily colonized from Lake Mead through Lake Havasu. The quagga mussel control program consists of surveillance activities and control measures. Surveillance activities are conducted annually in conjunction with regularly scheduled two- to three-week long Colorado River Aqueduct shutdowns, which have the added benefit of desiccating exposed quagga mussels. Control activities consist of continuous chlorination at Copper Basin, quarterly use of a mobile chlorinator at outlet towers and physical removal of mussels from the trash racks in Lake Havasu. Recent shutdown inspections have demonstrated that the combined use of chlorine and regularly scheduled shutdowns effectively control mussel infestation in the Colorado River Aqueduct. Metropolitan’s costs for controlling quagga mussels are between \$4 million and \$5 million per year.

Water Transfer, Storage and Exchange Programs

General. California’s agricultural activities consume approximately 34 million acre-feet of water annually, which is approximately 80 percent of the total water used for agricultural and urban uses and 40 percent of the water used for all consumptive uses, including environmental demands. Voluntary water transfers and exchanges can make a portion of this agricultural water supply available to support the State’s urban areas. Such existing and potential water transfers and exchanges are an important element for improving the water supply reliability within Metropolitan’s service area and accomplishing the reliability goal set by Metropolitan’s Board. Metropolitan is currently pursuing voluntary water transfer and exchange programs with State, federal, public and private water districts and individuals. The following are summary descriptions of some of these programs.

Arvin-Edison/Metropolitan Water Management Program. In December 1997, Metropolitan entered into an agreement with the Arvin-Edison Water Storage District (“Arvin-Edison”), an irrigation agency located southeast of Bakersfield, California. Under the program, Arvin-Edison stores water on behalf of Metropolitan. In January 2008, Metropolitan and Arvin-Edison amended the agreement to enhance the program’s capabilities and to increase the delivery of water to the California Aqueduct. Up to 350,000 acre-feet of Metropolitan’s water may be stored and Arvin-Edison is obligated to return up to 75,000 acre-feet of stored water in any year to Metropolitan, upon request. The agreement will terminate in 2035 unless extended. To facilitate the program, new wells, spreading basins and a return conveyance facility connecting Arvin-Edison’s existing facilities to the California Aqueduct have been constructed. The agreement also provides Metropolitan priority use of Arvin-Edison’s facilities to convey high quality water available on the east side of the San Joaquin Valley to the California Aqueduct. Metropolitan’s current storage account under the Arvin-Edison/Metropolitan Water Management Program is shown in the table “Metropolitan’s Water Storage Capacity and Water in Storage” under the heading “—Storage Capacity and Water in Storage” below.

Semitropic/Metropolitan Groundwater Storage and Exchange Program. In 1994 Metropolitan entered into an agreement with the Semitropic Water Storage District (“Semitropic”), located adjacent to the California Aqueduct north of Bakersfield, to store water in the groundwater basin underlying land within Semitropic. The minimum annual yield available to Metropolitan from the program is 31,500 acre-feet of water and the maximum annual yield is 223,000 acre-feet of water depending on the available unused capacity and the State Water Project allocation. Metropolitan’s current storage account under the Semitropic program is shown in the table “Metropolitan’s Water Storage Capacity and Water in Storage” under the heading “—Storage Capacity and Water in Storage” below.

California Aqueduct Dry-Year Transfer Program. Metropolitan has entered into agreements with the Kern Delta Water District, the Mojave Water Agency (“Demonstration Water Exchange Program”) and the San Bernardino Valley Municipal Water District (“SBVMWD”) to insure against regulatory and operational uncertainties in the State Water Project system that could impact the reliability of existing supplies. The total potential yield from the three agreements is approximately 80,000 acre-feet of water per year when sufficient water is available.

Metropolitan entered into an agreement with SBVMWD in April 2001 to coordinate the use of facilities and State Water Project water supplies. The agreement allows Metropolitan a minimum purchase of 20,000 acre-feet on an annual basis with the option to purchase additional water when available. Also, the program includes 50,000 acre-feet of carryover storage. In addition to water being supplied using the State Water Project, the previously stored water can be returned using an interconnection between the San Bernardino Central Feeder and Metropolitan’s Inland Feeder. ~~This program terminates on~~ [On October 14, 2014, the Board approved the extension of this agreement to](#) December 31, ~~2014~~ [2035](#).

Metropolitan entered into an agreement with Kern Delta Water District on May 27, 2003, for a groundwater banking and exchange transfer program to allow Metropolitan to store up to 250,000 acre-feet of State Water Contract water in wet years and permit Metropolitan, at Metropolitan’s option, a return of up to 50,000 acre-feet of water annually during hydrologic and regulatory droughts. Additionally, Metropolitan entered into a groundwater banking and exchange transfer agreement with Mojave Water Agency on October 29, 2003. This agreement was amended in 2011 to allow for the cumulative storage of up to 390,000 acre-feet. The agreement allows for Metropolitan to store water in an exchange account for later return. Through 2021, and when the State Water Project allocation is 60 percent or less, Metropolitan can annually withdraw the Mojave Water Agency’s State Water Project contractual amounts in excess of a 10 percent reserve. When the State Water Project allocation is over 60 percent, the reserved amount for Mojave’s local needs increases to 20 percent. Under a 100 percent allocation, the State Water Contract provides Mojave Water Agency 82,800 acre-feet of water. Metropolitan’s current storage account under these programs is shown in the table “Metropolitan’s Water Storage Capacity and Water in Storage” under the heading “—Storage Capacity and Water in Storage” below.

Other Water Purchase, Storage and Exchange Programs in the San Joaquin and Sacramento Valleys. Metropolitan has been negotiating, and will continue to pursue, water purchase, storage and exchange programs with other agencies in the Sacramento and San Joaquin Valleys. These programs involve the storage of both State Water Project supplies and water purchased from other sources to enhance Metropolitan’s dry-year supplies and the exchange of normal year supplies to enhance Metropolitan’s water reliability and water quality, in view of dry conditions and potential impacts from the ESA cases discussed above under the heading “—State Water Project—*Endangered Species Act Considerations.*” In addition, in the fall of 2008 DWR convened the State Drought Water Bank (the “Drought Water Bank”) as a one-year program to help mitigate water shortages in 2009. During 2009, Metropolitan purchased 36,900 acre-feet of Central Valley Water supplies through the Drought Water Bank, resulting in approximately 29,000 acre-feet of water deliveries after accounting for carriage and conveyance losses. In calendar year 2010, Metropolitan participated with other State Water Contractors as a group to purchase 88,137 acre-feet of water, resulting in approximately 68,000 acre-feet of deliveries to Metropolitan after carriage and conveyance losses. Additionally during 2010, Metropolitan entered into two transactions with the Westlands Water District and the San Luis Water District, neither of which is subject to carriage losses. Under the first transaction, Metropolitan purchased 18,453 acre-feet of water. In the second, Metropolitan accepted delivery of 110,692 acre-feet of water stored in the San Luis Reservoir, a joint use facility of the State Water Project and federal Central Valley Project, and returned two-thirds of that amount from Metropolitan’s State Water Project supply in 2011 for a net yield of approximately 37,000 acre-feet.

Metropolitan entered into an agreement with DWR in December 2007 to purchase a portion of the water released by the Yuba County Water Agency (“YCWA”). YCWA was involved in a SWRCB proceeding in which it was required to increase Yuba River fishery flows. Within the framework of agreements known as the Yuba River Accord, DWR ~~and the Bureau of Reclamation~~ entered into ~~agreements~~ an agreement for the long-term purchase of water from YCWA. Metropolitan ~~and~~ other State Water Project ~~contractors~~ Contractors, and San Luis Delta Mendota Water Authority entered into separate agreements with DWR for purchase of portions of the water made available. Metropolitan’s agreement allows Metropolitan to purchase at least 13,750 acre-feet to 35,000 acre-feet per year of water supplies in dry years through 2025. The agreement permits YCWA to transfer additional supplies at its discretion. For calendar years 2008, 2009 and 2010, Metropolitan purchased 26,430 acre-feet, 42,915 acre-feet and 67,068 acre-feet of water, respectively, from YCWA under this program. No purchases were made in calendar years 2011 and 2012, due to favorable water supply conditions. In calendar year 2013, Metropolitan purchased 10,209 acre-feet.

In 2013, in response to dry conditions, DWR established a new Multi-Year Water Pool Demonstration Program to allow two-year sales of State Water Project supplies between State Water Project ~~contractors~~ Contractors. In 2013, Metropolitan purchased 30,000 acre-feet of these supplies.

Metropolitan/CVWD/Desert Water Agency Exchange and Advance Delivery Agreement. Metropolitan has agreements with the CVWD and the Desert Water Agency (“Desert”) that require Metropolitan to exchange its Colorado River water for those agencies’ State Water Project contractual water on an annual basis. Because Desert and CVWD do not have a physical connection to the State Water Project, Metropolitan takes delivery of Desert’s and CVWD’s State Water Project supplies and delivers a like amount of Colorado River water to the agencies. In accordance with an advance delivery agreement executed by Metropolitan, CVWD and Desert, Metropolitan has delivered Colorado River water in advance to these agencies for storage in the Upper Coachella Valley groundwater basin. In years when it is necessary to augment available supplies to meet local demands, Metropolitan has the option to meet the exchange delivery obligation through drawdowns of the advance delivery account, rather than deliver its Colorado River supply. Metropolitan’s current storage account under the CVWD/Desert program is shown in the table “Metropolitan’s Water Storage Capacity and Water in Storage” under the heading “—Storage Capacity and Water in Storage” below. In addition to the CVWD/Desert exchange agreements, Metropolitan has entered into separate agreements with CVWD and Desert for delivery of non-State Water Project supplies acquired by CVWD or Desert. Similarly, Metropolitan takes delivery of these supplies from State Water Project

facilities and incurs an exchange obligation to CVWD or Desert. From 2008 through 2013, Metropolitan has received a net additional supply of 52,189 acre-feet of water acquired by CVWD and Desert.

Other Agreements. Metropolitan is entitled to storage and access to stored water in connection with various storage programs and facilities. See “METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct” and “REGIONAL WATER RESOURCES—Local Water Supplies—*Conjunctive Use*” in this Appendix A, as well as the table “Metropolitan’s Water Storage Capacity and Water in Storage” under the heading “—Storage Capacity and Water in Storage” below.

Storage Capacity and Water in Storage

Metropolitan’s storage capacity, which includes reservoirs, conjunctive use and other groundwater storage programs within Metropolitan’s service area and groundwater and surface storage accounts delivered through the State Water Project or Colorado River Aqueduct, is approximately 5.93 million acre-feet. In 2013, approximately 626,000 acre-feet of stored water was emergency storage that was reserved for use in the event of supply interruptions from earthquakes or similar emergencies (see “METROPOLITAN’S WATER DELIVERY SYSTEM—Seismic Considerations” in this Appendix A), as well as extended drought. Metropolitan’s emergency storage requirement is established periodically to provide a six-month water supply at 75 percent of member agencies retail demand under normal hydrologic conditions. Metropolitan’s ability to replenish water storage, both in the local groundwater basins and in surface storage and banking programs, has been limited by Bay-Delta pumping restrictions under the Interim Remedial Order in *NRDC v. Kempthorne* and the biological opinions issued for listed species. See “—State Water Project—*Endangered Species Act Considerations*” above. Metropolitan replenishes its storage accounts when imported supplies exceed demands. Effective storage management is dependent on having sufficient years of excess supplies to store water so that it can be used during times of shortage. Historically, excess supplies have been available in about seven of every ten years. Metropolitan forecasts that, with anticipated supply reductions from the State Water Project due to pumping restrictions, it will need to draw down on storage in about seven of ten years and will be able to replenish storage in about three years out of ten. This reduction in available supplies extends the time required for storage to recover from drawdowns and could require Metropolitan to implement its Water Supply Allocation Plan during extended dry periods.

As a result of increased State Water Project supplies and reduced demands from 2010 to 2012, Metropolitan rebuilt its storage after several years of withdrawals to approximately ~~3.356~~3.375 million acre-feet, including emergency storage. This was the highest end-of-year total water reserves in Metropolitan’s history. In 2013, Metropolitan drew ~~405,000~~407,000 acre-feet from storage to meet demands, reducing overall storage to ~~2.954~~2.968 million acre-feet. Metropolitan expects to draw between 1.0 million acre-feet and 1.3 million acre-feet from storage in 2014 and anticipates that its 2014 year-end overall storage will be between 1.7 million acre-feet and 2.0 million acre-feet. The following table shows three years of Metropolitan’s water in storage as of January 1, 2014, including emergency storage.

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METROPOLITAN'S WATER STORAGE CAPACITY AND WATER IN STORAGE⁽¹⁾
(in Acre-Feet)

<u>Water Storage Resource</u>	<u>Storage Capacity</u>	<u>Water in Storage January 1, 2014</u>	<u>Water in Storage January 1, 2013</u>	<u>Water in Storage January 1, 2012</u>
<i>Colorado River Aqueduct</i>				
Desert / CVWD Advance Delivery Account	800,000	260,000	321,000	203,000
Lake Mead ICS	<u>1,500,000</u>	476,000 <u>474,000</u>	<u>580,000</u>	<u>419,000</u>
Subtotal	2,300,000	736,000734,000	901,000	622,000
<i>State Water Project</i>				
Arvin-Edison Storage Program	350,000	161,000 <u>180,000</u>	201,000 <u>220,000</u> <u>0</u>	164,000
Semitropic Storage Program	350,000	238,000	285,000	245,000
Kern Delta Storage Program	250,000	169,000	179,000	135,000
San Bernardino Valley MWD				
Coordinated Operating Agreement	50,000	-0-	-0-	-0-
Mojave Storage Program	390,000 ⁽⁵⁾	39,000	60,000	45,000
Castaic Lake and Lake Perris ⁽²⁾	219,000	219,000	219,000	219,000
Metropolitan Article 56 Carryover ⁽³⁾	200,000 ⁽⁶⁾	49,000	156,000	200,000
Other State Water Project Carryover ⁽⁴⁾	n/a	174,000	124,000	43,000
Emergency Storage	<u>334,000</u>	<u>334,000</u>	<u>334,000</u>	<u>334,000</u>
Subtotal	2,143,000	1,383,0001,402,000	1,558,0001,577,000	1,385,000
<i>Within Metropolitan's Service Area⁽⁷⁾</i>				
Diamond Valley Lake	810,000	584,000	690,000	786,000
Lake Mathews	182,000	139,000	102,000	142,000
Lake Skinner	<u>44,000</u>	<u>36,000</u>	<u>38,000</u>	<u>37,000</u>
Subtotal⁽⁷⁾	1,036,000	759,000	830,000	965,000
<i>Member Agency Storage Programs</i>				
Cyclic Storage, Conjunctive Use, and Supplemental Storage	<u>455,000</u>	<u>73,000</u>	<u>67,000</u>	<u>30,000</u>
Total	<u>5,934,000</u>	2,951,0002,968,000	3,356,0003,375,000	3,002,000

Source: Metropolitan.

- (1) Water storage capacity and water in storage are measured based on engineering estimates and are subject to change.
- (2) Flexible storage allocated to Metropolitan under its State Water Contract.
- (3) Article 56 Carryover storage capacity is dependent on the annual State Water Project allocation, which varies from year to year. Article 56 supplies represent water that is allocated to a State Water Project contractor in a given year and carried over to the next year pursuant to the State Water Contract.
- (4) Includes Article 56 Carryover from prior years, non-project carryover, and carryover of curtailed deliveries pursuant to Article 14(b) of Metropolitan's State Water Contract.
- (5) The Mojave Storage Program agreement was amended in 2011 to allow for cumulative storage of up to 390,000 acre-feet.

- (6) Metropolitan’s State Water Project carryover capacity ranges from 100,000 to 200,000 acre-feet, on a sliding scale that depends on the final State Water Project allocation. At allocations of 50 percent or less, Metropolitan may store 100,000 acre-feet, and at allocations of 75 percent or greater, Metropolitan may store up to 200,000 acre-feet. For the purposes of this table, the highest possible carryover capacity is displayed.
- (7) Includes 292,000 acre-feet of emergency storage in Metropolitan’s reservoirs.

Water Conservation

The central objective of Metropolitan’s water conservation program is to help ensure adequate, reliable and affordable water supplies for Southern California by actively promoting efficient water use. The importance of conservation to the region has increased in recent years because of drought conditions in the State Water Project watershed and court-ordered restrictions on Bay-Delta pumping, as described under “—State Water Project” above. Water conservation is an integral component of Metropolitan’s IRP Strategy, ~~Water Surplus and Drought Management~~ WSDM Plan and Water Supply Allocation Plan, each described in this Appendix A under “METROPOLITAN’S WATER SUPPLY.”

Metropolitan’s conservation program has largely been developed to assist its member agencies in meeting the “best management practices” (“BMP”) of the California Urban Water Conservation Council’s Memorandum of Understanding Regarding Urban Water Conservation in California (“CUWCC MOU”) and to meet the conservation goals of the 2010 IRP Update. See “—Integrated Water Resources Plan” above. Under the terms of the CUWCC MOU and Metropolitan’s Conservation Credits Program, Metropolitan assists and co-funds member agency conservation programs designed to achieve greater water use efficiency in residential, commercial, industrial, institutional and landscape uses. Metropolitan uses its Water Stewardship Rate, which is charged for every acre-foot of water conveyed by Metropolitan, together with available grant funds, to fund conservation incentives and other water management programs. All users of Metropolitan’s system benefit from the system capacity made available by investments in demand management programs like the Conservation Credits Program. See “METROPOLITAN REVENUES—Rate Structure—*Water Stewardship Rate*” in this Appendix A. Direct spending by Metropolitan on active conservation incentives, including rebates for water-saving plumbing fixtures, appliances and equipment, from fiscal year 1989-90 through fiscal year ~~2012-13 was about \$333 million~~ 2013-14 was about \$352 million. In fiscal year 2013-2014, Metropolitan increased the annual conservation budget from \$20 million to \$40 million, which has been used to fund a \$5.5 million outreach campaign and to double the incentive for the turf replacement program. As of August 2014, \$15.8 million has been committed to the turf replacement program. The 2010 Integrated Water Resources Plan Update estimates that 1,037,000 acre-feet of water will be conserved annually in southern California by 2025. See “—Integrated Water Resources Plan” above.

The ~~Water Surplus and Drought Management Plan~~ (“WSDM Plan”), which was adopted by Metropolitan’s Board in April 1999, evolved from Metropolitan’s experiences during the droughts of 1976-77 and 1987-92. The WSDM Plan splits resource actions into two major categories: Surplus Actions and Shortage Actions. The Surplus Actions store surplus water, first inside then outside the region. The Shortage Actions of the WSDM Plan are split into three sub-categories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as a part of the response to prevailing shortage conditions. Conservation and water efficiency programs are part of Metropolitan’s resource management strategy through all categories.

Metropolitan’s plan for allocation of water supplies in the event of shortage (the “Water Supply Allocation Plan”; see “—Water Supply Allocation Plan” below) allocates Metropolitan’s water supplies among its member agencies, based on the principles contained in the WSDM Plan, to reduce water use and drawdowns from water storage reserves. Metropolitan’s member agencies and retail water suppliers in Metropolitan’s service area also have the ability to implement water conservation and allocation programs, and some of the retail suppliers in Metropolitan’s service area have initiated conservation measures. The success of conservation measures in conjunction with the Water Supply Allocation Plan is evidenced as a contributing factor in the lower than budgeted water sales during fiscal years 2009-10, 2010-11 and 2011-12.

Legislation approved in November 2009 sets a statewide conservation target for urban per capita water use of 20 percent reductions by 2020 (with credits for existing conservation) at the retail level, providing an additional catalyst for conservation by member agencies and retail suppliers. (See “—State Water Project—*Bay-Delta Regulatory and Planning Activities*” above.) Metropolitan’s water sales projections incorporate an estimate of conservation savings that will reduce retail demands. Current projections include an estimate of additional water use efficiency savings that would result from local agencies reducing their per capita water use in response to the 20 percent by 2020 conservation savings goals required by recent legislation as well as an estimate of additional conservation that would have to occur to reach Metropolitan’s IRP goal of reducing overall regional per capita water use by 20 percent by 2020.

Water Supply Allocation Plan

~~The Water Supply Allocation Plan provides a formula for equitable distribution of available water supplies in case of extreme water shortages within Metropolitan’s service area. Delivery within a member agency of more than its allocated amount of Metropolitan supplies will subject the member agency to a penalty of one to four times Metropolitan’s full service rate for untreated Tier 2 water, depending on how much the member agency’s water use for the twelve-month period beginning on July 1 exceeds its allocated amount. See “METROPOLITAN REVENUES—Water Rates by Water Category” in this Appendix A. Any penalties collected may be rebated to the member agency that paid them to fund water management projects.—~~

The Water Supply Allocation Plan was approved by the Board in February 2008. The Water Supply Allocation Plan provides a formula for equitable distribution of available water supplies in case of extreme water shortages within Metropolitan’s service area. On April 14, 2009, Metropolitan’s Board adopted a resolution declaring a regional water shortage and implementing the Water Supply Allocation Plan, effective July 1, 2009. The Board set the “Regional Shortage Level” at Water Supply Allocation Plan Level 2, which required reduction of regional water use by approximately 10 percent and resulted in a total allocation of about 2.09 million acre-feet of Metropolitan water in fiscal year 2009-10. On April 13, 2010, the Board adopted a resolution recognizing the continuing regional water shortage and again setting the Regional Shortage Level at Water Supply Allocation Plan Level 2, which sustained the regional water use reduction of approximately 10 percent. Due to improved hydrologic and storage conditions, on April 12, 2011, the Board terminated implementation of the 2010-11 Water Supply Allocation Plan, restoring imported water deliveries to member agencies ~~without risk of to pre-allocation penalties~~ levels. Following Board-directed review of the Water Supply Allocation Plan three years after its approval, on September 13, 2011, the Board approved adjustments to the formula for calculating member agency supply allocations for any future implementation of the Water Supply Allocation Plan. Although the Act gives each of Metropolitan’s member agencies a preferential entitlement to purchase a portion of the water served by Metropolitan (see “METROPOLITAN REVENUES—Preferential Rights”), historically, these rights have not been used in allocating Metropolitan’s water.

Metropolitan’s member agencies and retail water suppliers in Metropolitan’s service area also may implement water conservation and allocation programs within their respective service territories in times of shortage.

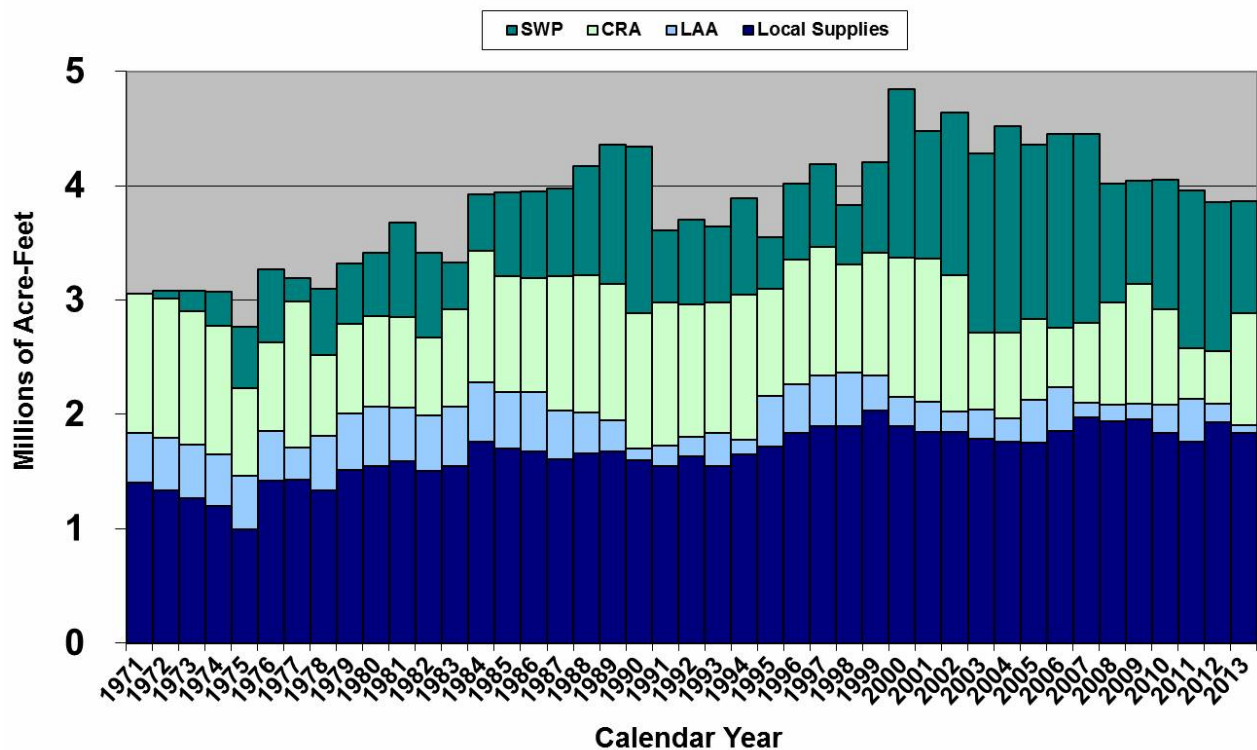
REGIONAL WATER RESOURCES

The water supply for Metropolitan's service area is provided in part by Metropolitan and in part by non-Metropolitan sources available to members. Approximately 60 percent of the water supply for Metropolitan’s service area is imported water received by Metropolitan from its Colorado River Aqueduct and the State Water Project and by the City of Los Angeles (the “City”) from the Los Angeles Aqueduct. While the City is one of the largest water customers of Metropolitan, it receives a substantial portion of its water from the Los Angeles Aqueduct and local groundwater supply. The balance of water within the region is produced locally, primarily from groundwater supplies and runoff.

Metropolitan’s member agencies are not required to purchase or use any of the water available from Metropolitan. Some agencies depend on Metropolitan to supply nearly all of their water needs, regardless of the weather. Other agencies, with local surface reservoirs or aqueducts that capture rain or snowfall, rely on Metropolitan more in dry years than in years with heavy rainfall, while others, with ample groundwater supplies, purchase Metropolitan water only to supplement local supplies and to recharge groundwater basins. The demand for supplemental supplies provided by Metropolitan is dependent on water use at the retail consumer level and the amount of locally supplied and conserved water. See “METROPOLITAN’S WATER SUPPLY—Water Conservation” in this Appendix A and “—Local Water Supplies” below. Consumer demand and locally supplied water vary from year to year, resulting in variability in water sales. Future reliance on Metropolitan supplies will be dependent, among other things, on local projects and the amount of water, if any, that may be derived from sources other than Metropolitan. In recent years, supplies and demands have been affected by drought, water use restrictions, economic conditions, weather conditions and environmental laws, regulations and judicial decisions, as described in this Appendix A under “METROPOLITAN’S WATER SUPPLY.” For information on Metropolitan’s water sales revenues, see “METROPOLITAN REVENUES” and “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

The following graph shows a summary of the regional sources of water supply for the years 1971 to 2013. Local supplies available within Metropolitan’s service area are augmented by water imported by the City through the Los Angeles Aqueduct (“LAA”) and Metropolitan supplies provided through the CRA and State Water Project.

**Source of Water Supply in the Metropolitan Service Area
(1971-2013)**



Source: Metropolitan.

The major sources of water for Metropolitan’s member agencies in addition to supplies provided by Metropolitan are described below.

Los Angeles Aqueduct

The City, through its Department of Water and Power (“LADWP”), operates its Los Angeles Aqueduct system to import water from the Owens Valley and the Mono Basin on the eastern slopes of the Sierra Nevada in eastern California. Prior to the 1990-1991 drought, the City had imported an average of 440,000 acre-feet of water annually from the combined Owens Valley/Mono Basin system, of which about 90,000 acre-feet came from the Mono Basin. Under the Mono Lake Basin Water Right Decision (Decision 1631) issued in September 1994, which revised LADWP’s water rights licenses in the Mono Basin, the City is limited to export 16,000 acre-feet annually from the Mono Basin until it reaches its target elevation of 6,391 feet above mean sea level.

Pursuant to the City’s turnout agreement with DWR, Antelope Valley-East Kern Water Agency (“AVEK”) and Metropolitan, LADWP commenced construction in 2010 of the turnout facilities along the California Aqueduct within AVEK’s service area. Upon completion, expected by early 2015, the turnout will enable delivery of water from the California Aqueduct to the Los Angeles Aqueduct. Conditions precedent to such delivery of water include obtaining agreements for the transfer of non-State Water Project water directly from farmers, water districts or others in Northern and Central California, available capacity in the California Aqueduct and compliance with State Water Project water quality requirements. The agreement allows for use of the turnout for delivery of non-State Water Project water annually to the City in amounts not to exceed the supplies lost to the City as a result of its Eastern Sierra environmental obligations, including water for the Lower Owens River Project and the Owens Lake Dust Mitigation Project which could use up to 95,000 acre-feet of Los Angeles Aqueduct water.

Historically, the Los Angeles Aqueduct and local groundwater supplies have been nearly sufficient to meet the City’s water requirements during normal water supply years. As a result, prior to the 1990-1991 drought only about 13 percent of the City’s water needs (approximately 82,000 acre-feet) were supplied by Metropolitan. From fiscal year 2000-01 to fiscal year 2010-11, approximately 31 to 71 percent of the City’s total water requirements were met by Metropolitan. For the five fiscal years ended June 30, ~~2013, 2014,~~ the City’s water deliveries from Metropolitan averaged approximately ~~292,000~~293,000 acre-feet per year, which constituted approximately ~~52~~53 percent of the City’s total water supply. Deliveries from Metropolitan to the City during this period varied between approximately 166,000 acre-feet per year and approximately 435,000 acre-feet per year. See “METROPOLITAN REVENUES—Principal Customers” in this Appendix A. According to LADWP’s Year 2010 Urban Water Management Plan, the City is planning to increase locally-developed supplies including recycled water, new conservation, stormwater capture and local groundwater from the average for the five-year period ending June 30, 2010 of 12 percent to 43 percent of its normal year supplies by fiscal year 2034-35. Accordingly, the City’s reliance on Metropolitan supplies will decrease from the five year average ending June 30, ~~2011~~2010 of 52 percent to 24 percent of its normal year supplies by fiscal year 2034-35. However, the City may still purchase up to 511,000 acre-feet per year or 82 percent of its dry year supplies from Metropolitan ~~over the next 25 years until 2035~~. This corresponds to an increase from normal to dry years of approximately ~~255,000~~257,000 acre-feet in potential demand for supplies from Metropolitan.

LADWP analyzed the additional impacts to the Los Angeles Aqueduct’s water supply deliveries for various environmental projects aimed at improving air quality and fish and riparian habitat in the Owens Valley. ~~In October 2012, LADWP filed a federal lawsuit challenging Owens Valley mitigation demands from air pollution control regulators.~~—LADWP reports that, in ~~2012,~~2013, ~~62~~ percent of its Los Angeles Aqueduct water was devoted to dust and environmental mitigation projects in the Owens Valley and Eastern Sierra, resulting in the need to purchase an equivalent amount of Metropolitan supply. On June 27, 2013,

LADWP and regulators reached a major agreement regarding future dust control on portions of Owens Lake, ~~preservation of historic Native American artifacts~~ and use of new water-saving dust control measures.

Local Water Supplies

Local water resources include groundwater production, recycled water production and diversion of surface flows. While local water resources are non-Metropolitan sources of water supply, Metropolitan has executed agreements for storage of Metropolitan supplies in local groundwater basins and provided incentives for local supply development as described below. Member agencies and other local agencies have also independently funded and developed additional local supplies, including groundwater storage and clean-up, recycled water and desalination of brackish or high salt content water.

Metropolitan's water sales projections are based in part on projections of locally-supplied water. Projections of future local supplies are based on estimated yields from sources and projects that are currently producing water or are under construction at the time a water sales projection is made. Additional reductions in Metropolitan's water sales projections are made to account for future local supply augmentation projects, based on the 2010 IRP Update goals. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Projections" and "METROPOLITAN'S WATER SUPPLY—Integrated Water Resources Plan" in this Appendix A.

Groundwater. Demands for about 1.5 million acre-feet per year, about one-third of the annual water demands for approximately ~~18.2~~18.4 million residents of Metropolitan's service area, are met from groundwater production. Local groundwater supplies are supported by recycled water, which is blended with imported water and recharged into groundwater basins, and also used for creating seawater barriers that protect coastal aquifers from seawater intrusion.

Groundwater Storage Programs. Metropolitan has executed agreements with a number of agencies to develop groundwater storage projects in its service area. These projects are designed to help meet the water delivery reliability goals of storing surplus imported supplies when available so that local agencies can withdraw stored groundwater during droughts or other periods of water supply shortage. In 2000, Metropolitan was allocated \$45 million in State Proposition 13 bond proceeds to develop groundwater storage projects in Metropolitan's service area. The nine projects provide about 212,000 acre-feet of groundwater storage and have a combined extraction capacity of about 70,000 acre-feet per year. During fiscal year 2008-09, over 70,000 acre-feet of stored water was produced and sold from these storage accounts. Fiscal year 2009-10 sales from the nine accounts totaled nearly 41,000 acre-feet, leaving a balance of approximately 26,000 acre-feet in the storage accounts. Metropolitan began refilling the programs in fiscal year 2010-11. As of ~~March~~October 2014, the balance in the nine accounts was ~~over 66,000~~approximately 49,000 acre-feet. ~~In April 2014,~~ Metropolitan ~~plans to request over 35,000~~has called nearly 40,000 acre-feet to be produced from these storage accounts ~~by July 1, during the 15-month period from April 2014 through June 2015.~~ See table "Metropolitan's Water Storage Capacity and Water in Storage" under "METROPOLITAN'S WATER SUPPLY—Storage Capacity and Water in Storage" in this Appendix A.

Recovered Groundwater. Contamination of groundwater supplies is a growing threat to local groundwater production. Metropolitan has been supporting increased groundwater production and improved regional supply reliability by offering financial incentives to agencies for production and treatment of degraded groundwater since 1991. Metropolitan has executed agreements with local agencies to provide financial incentives to 24 projects that recover contaminated groundwater with total contract yields of about 112,500 acre-feet per year. During fiscal year ~~2012-13, 2013-14,~~ Metropolitan provided incentives for approximately ~~55,000~~68,400 acre-feet of recovered water under these agreements. Total groundwater recovery use under executed agreements is expected to grow to 76,000 acre-feet by 2015.

Surface Runoff. Local surface water resources consist of runoff captured in storage reservoirs and diversions from streams. Since 1980, agencies have used an average of 116,000 acre-feet per calendar year of local surface water. Local surface water supplies are heavily influenced by year to year local weather conditions, varying from a high of 188,000 acre-feet in calendar year 1998 to a low of 65,000 acre-feet in calendar year 2003.

Conjunctive Use. Conjunctive use is accomplished when groundwater basins are used to store imported supplies during water abundant periods. The stored water is used during shortages and emergencies with a corresponding reduction in surface deliveries to the participating agencies. Regional benefits include enhancing Metropolitan's ability to capture excess surface flows during wet years from both the State Water Project and Colorado River. Groundwater storage is accomplished using spreading basins, injection wells, and in-lieu deliveries where imported water is substituted for groundwater, and the groundwater not pumped is considered stored water.

Metropolitan has promoted conjunctive use at the local agency level under its Replenishment Service Program by discounting rates for imported water placed into groundwater or reservoir storage during wet months. The discounted rate and program rules encouraged construction of additional groundwater production facilities allowing local agencies to be more self-sufficient during shortages. (See “*Groundwater Storage Programs*” above.) In calendar year 2006, Metropolitan delivered approximately 247,000 acre-feet of water as replenishment water. In calendar year 2007, Metropolitan delivered approximately 46,000 acre-feet of water as replenishment water through May 1, 2007 then discontinued such deliveries ~~through~~until May 10, 2011 when Metropolitan's Board authorized sale of up to 225,000 acre-feet of discounted replenishment service deliveries to member agencies for the remainder of calendar year 2011. In calendar year 2011, Metropolitan delivered approximately 225,000 acre-feet of this discounted replenishment water. No replenishment sales ~~are~~were budgeted for fiscal year 2012-13 and thereafter. The Replenishment Service Program was discontinued effective December 31, 2012. See “METROPOLITAN REVENUES—Classes of Water Service—*Replenishment*” and “MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Projections” in this Appendix A.

Recycled Water. Metropolitan has supported recycled water use to offset ~~potable~~-water demands and improve regional supply reliability by offering financial incentives to agencies for production and sales of recycled water since 1982. Metropolitan has executed agreements with local agencies to provide financial incentives to 75 recycled water projects with total contract yields of about 307,000 acre-feet per year. During fiscal year ~~2012-13, 2013-14~~, Metropolitan provided incentives for approximately ~~178,000~~180,000 acre-feet of reclaimed water under these agreements. Total recycled water use under executed agreements is expected to grow to about 187,000 acre-feet by 2015.

Seawater Desalination. Metropolitan's IRP includes seawater desalination as a core local supply and supports foundational actions to lay the groundwork for accelerating seawater desalination development as needed in the future. To encourage local development, Metropolitan has signed Seawater Desalination Program (“SDP”) incentive agreements with three of its member agencies: Long Beach, Municipal Water District of Orange County (“MWDOC”) and West Basin Municipal Water District. The SDP agreements provide incentives to the member agencies of up to ~~\$250~~\$340 per acre-foot when the desalinated supplies are produced. Agreement terms are for the earlier of 25 years or through 2040 and are designed to phase out if Metropolitan's rates surpass the unit cost of producing desalinated seawater. SDP agreements are subject to final approval by Metropolitan's Board after review of the complete project description and environmental documentation. ~~Collectively these~~These projects are currently in the development phase and collectively are anticipated to produce up to 46,000 acre-feet annually.

In November 2012, SDCWA approved a water purchase agreement with Poseidon Resources LLC (“Poseidon Resources”) for a seawater desalination project in Carlsbad (the “Carlsbad Project”) to provide a minimum of 48,000 acre-feet and a maximum of 56,000 acre-feet of desalinated supplies to SDCWA per year. The Carlsbad Project is under construction and is anticipated to be completed in 2016.

Other seawater desalination projects that could provide supplies to Metropolitan’s service area are under development or consideration. Poseidon Resources is developing a 56,000 acre-feet per year plant in Huntington Beach which is currently in the permitting phase. MWDOC and the Cities of Anaheim, Fullerton, and Santa Ana applied for incentive funding under Metropolitan’s Local Resources Program (“LRP”) on behalf of the project in October 2013 and Metropolitan is currently reviewing the application. SDCWA is studying the potential for a seawater desalination plant in Camp Pendleton which would initially produce up to 56,000 acre-feet per year and potentially up to 168,000 acre-feet per year with a phased build out. SDCWA, in collaboration with Mexican government agencies, also is considering a 56,000 acre-feet per year facility in Rosarito Beach, Mexico. If developed, SDCWA could receive a portion of the desalinated supplies through a delivery pipeline across the international border to SDCWA. Otay Water District, located in San Diego County along the Mexico border, is separately considering the feasibility of purchasing water from an alternative seawater desalination project at the same site in Rosarito Beach. Approvals from a number of U.S. and Mexican federal agencies, along with State and local approvals, would be needed for either cross-border project to proceed.

METROPOLITAN’S WATER DELIVERY SYSTEM

Method of Delivery

Metropolitan’s water delivery system is made up of three basic components: the Colorado River Aqueduct, the California Aqueduct of the State Water Project and Metropolitan’s internal water distribution system. Metropolitan’s delivery system is integrated and designed to meet the differing needs of its member agencies. Metropolitan seeks redundancy in its delivery system to assure reliability in the event of an outage. Current system expansion and other improvements will be designed to increase the flexibility of the system. Since local sources of water are generally used to their maximum each year, growth in the demand for water is partially met by Metropolitan. Accordingly, the operation of Metropolitan’s water system is being made more reliable through the rehabilitation of key facilities as needed, improved preventive maintenance programs and the upgrading of Metropolitan’s operational control systems. See “CAPITAL INVESTMENT PLAN” in this Appendix A.

Colorado River Aqueduct. Work on the Colorado River Aqueduct commenced in 1933 and water deliveries started in 1941. Additional facilities were completed by 1961 to meet additional requirements of Metropolitan’s member agencies. The Colorado River Aqueduct is 242 miles long, starting at the Lake Havasu intake and ending at the Lake Mathews terminal reservoir. Metropolitan owns all of the components of the Colorado River Aqueduct, which include five pump plants, 64 miles of canal, 92 miles of tunnels, 55 miles of concrete conduits and 144 underground siphons totaling 29 miles in length. The pumping plants lift the water approximately 1,617 feet over several mountain ranges to Metropolitan’s service area. See “METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct” in this Appendix A.

State Water Project. The initial portions of the State Water Project serving Metropolitan were completed in 1973. State Water Project facilities are owned and operated by DWR. Twenty-nine agencies have entered into contracts with DWR to receive water from the State Water Project. See “METROPOLITAN’S WATER SUPPLY—State Water Project” in this Appendix A.

Internal Distribution System. Metropolitan’s internal water distribution system includes components that were built beginning in the 1930s and through the present. Metropolitan owns all of these components, including 14 dams and reservoirs, five regional treatment plants, over 800 miles of transmission pipelines, feeders and canals, and 16 hydroelectric plants with an aggregate capacity of 131 megawatts.

Diamond Valley Lake. Diamond Valley Lake, a man-made reservoir located southwest of the city of Hemet, California, covers approximately 4,410 acres and has capacity to hold approximately 810,000 acre-feet or 265 billion gallons of water. Diamond Valley Lake was constructed to serve approximately 90 percent of Metropolitan’s service area by gravity flow. Associated hydraulic structures consist of an inlet-outlet tower, pumps and generating facilities, a pressure control facility, connecting tunnels and a forebay. Imported water is delivered to Diamond Valley Lake during surplus periods. The reservoir provides more reliable delivery of imported water from the State Water Project and the Colorado River Aqueduct during summer months, droughts and emergencies. In addition, Diamond Valley Lake is capable of providing more than one-third of Southern California’s water needs from storage for approximately six months after a major earthquake (assuming that there has been no impairment of Metropolitan’s internal distribution network). See the table “Metropolitan’s Water Storage Capacity and Water in Storage” under “METROPOLITAN’S WATER SUPPLY—Storage Capacity and Water in Storage” in this Appendix A for the amount of water in storage at Diamond Valley Lake. Excavation at the project site began in May 1995. Diamond Valley Lake was completed in March 2000, at a total cost of \$2 billion, and was in full operation in December 2001.

Inland Feeder. The Inland Feeder is a 44-mile-long conveyance system that connects the State Water Project to Diamond Valley Lake and the Colorado River Aqueduct. The Inland Feeder provides greater flexibility in managing Metropolitan’s major water supplies and allows greater amounts of State Water Project water to be accepted during wet seasons for storage in Diamond Valley Lake. In addition, the Inland Feeder increases the conveyance capacity from the East Branch of the State Water Project by 1,000 cfs, allowing the East Branch to operate up to its full capacity. Construction of the Inland Feeder was completed in September 2009 at a total cost of \$1.14 billion.

Operations Control Center. Metropolitan’s water conveyance and distribution system operations are coordinated from the Operations Control Center (“OCC”) located in the Eagle Rock area of Los Angeles. The OCC plans, balances and schedules daily water and power operations to meet member agencies’ demands, taking into consideration the operational limits of the entire system.

Water Treatment

Metropolitan filters and disinfects water at five water treatment plants: the F.E. Weymouth Treatment Plant, the Joseph Jensen Treatment Plant, the Henry J. Mills Treatment Plant, the Robert B. Diemer Treatment Plant and the Robert A. Skinner Treatment Plant. The plants treat an average of between 1.7 billion and 2.0 billion gallons of water per day, and have a maximum capacity of approximately 2.6 billion gallons per day. Approximately 60 percent of Metropolitan’s water deliveries are treated water.

Federal and state regulatory agencies continually monitor and establish new water quality standards. New water quality standards could affect availability of water and impose significant compliance costs on Metropolitan. The Safe Drinking Water Act (“SDWA”) was amended in 1986 and again in 1996. The SDWA establishes drinking water quality standards, monitoring, public notification and enforcement requirements for public water systems. To achieve these objectives, the U.S. Environmental Protection Agency (“USEPA”), as the lead regulatory authority, promulgates national drinking water regulations and develops the mechanism for individual states to assume primary enforcement responsibilities. The California Department of Public Health (“CDPH”), formerly known as the Department of Health Services, has lead authority over California water agencies. Metropolitan continually monitors new water quality laws and regulations and frequently comments on new legislative proposals and regulatory rules.

In October 2007, Metropolitan began adding fluoride to treated water at all five of its treatment plants for regional compliance with Assembly Bill 733, enacted in 1995, which requires fluoridation of any public water supply with over 10,000 service connections in order to prevent tooth decay, subject to availability of sufficient funding. Design and construction of the fluoridation facilities at Metropolitan's five treatment plants were funded primarily by a \$5.5 million grant from the California Dental Association Foundation, in conjunction with the California Fluoridation 2010 Work Group. On August 9, 2011, four individuals filed litigation (*Foli, et al. v. Metropolitan Water District of Southern California, et al.*) in federal district court alleging deprivation of civil rights, impairment of civil rights and unfair competition based on fluoridation of Metropolitan's treated water deliveries. On April 10, 2012 the court granted Metropolitan's motion to dismiss the case without prejudice. Plaintiffs filed a first amended complaint on April 24, 2012. Metropolitan's motion to dismiss the first amended complaint was granted on January 25, 2013, dismissing the case with prejudice. [On February 20, 2013, plaintiffs filed a notice of appeal to the U.S. Court of Appeals for the Ninth Circuit. Plaintiffs are appealing the January 2013 order which granted Metropolitan's motion to dismiss plaintiffs' first amended complaint, as well as the April 2012 order which granted Metropolitan's motion to dismiss plaintiffs' original complaint. Plaintiffs filed their opening brief with the Ninth Circuit on June 27, 2013, and Metropolitan filed its answering brief and motion for judicial notice on August 28, 2013. Plaintiffs filed their reply brief and a request for judicial notice with the Ninth Circuit on October 10, 2013. No trial date has been set.](#)

Disinfection By-products. As part of the requirements of the SDWA, the USEPA is required to establish regulations to strengthen protection against microbial contaminants and reduce potential health risks from disinfection by-products. Disinfectants and disinfection by-products ("DBPs" and, together with disinfectants, "D/DBPs") were addressed by the USEPA in two stages. In the Stage 1 Disinfectants and Disinfection Byproducts Rule ("Stage 1 DBPR"), the maximum contaminant level ("MCL") for one of the classes of DBPs, total trihalomethanes ("TTHM"), was lowered from 100 parts per billion ("ppb") to 80 ppb. MCLs were also set for haloacetic acids ("HAA") and bromate (an ozone DBP). In addition, the Stage 1 DBPR includes a treatment requirement to remove disinfection by-product precursors. Compliance with these requirements started in January 2002. Metropolitan already satisfied these requirements for its Colorado River Water, which has lower levels of disinfection by-product precursors than State Water Project water. State Water Project water has a greater amount of disinfection by-product precursors and modifications to the treatment process have been made to meet the requirements of the Stage 1 DBPR. Longer-term D/DBP control has been achieved by switching to ozone as the primary disinfectant at the Mills, Jensen and Skinner treatment plants. Mills and Jensen treatment plants only receive water from the State Water Project. Ozone facilities at the Mills and Jensen plants began operating in October 2003 and July 2005, respectively. Skinner, Diemer and Weymouth water treatment plants receive a blend of water from the State Water Project and the Colorado River. Ozone facilities at the Skinner plant became operational in October 2010. The Diemer plant is nearing the end of construction of its ozone facilities with an online date anticipated [by in](#) 2014. Construction of Weymouth ozone facilities is underway and anticipated to be complete in fiscal year 2016-17. See "CAPITAL INVESTMENT PLAN—Major Projects of Metropolitan's Capital Investment Plan" in this Appendix A. Ozone will enable these plants to reliably treat water containing higher blends of State Project water and still meet the new microbial and D/DBP standards, while also improving the aesthetics, such as taste and odor, of water delivered to consumers.

The second stage of the D/DBP Rule ("Stage 2 DBPR") was finalized in January 2006. The Stage 2 DBPR requires water systems to meet the TTHM and HAA standards at individual monitoring locations in the distribution system as opposed to a distribution system-wide average under the Stage 1 DBPR. Metropolitan does not anticipate any further capital improvements in order to meet the Stage 2 DBPR requirements.

The Interim Enhanced Surface Water Treatment Rule and the Long Term 2 Enhanced Surface Water Treatment Rule ("LT2ESWTR") have been implemented to simultaneously provide protection against microbial pathogens while the D/DBP rules provide reduced risk from disinfection by-products.

Metropolitan does not anticipate any further capital improvements in order to meet the LT2ESWTR requirements.

Perchlorate. Perchlorate, used in solid rocket propellants, munitions and fireworks, has contaminated some drinking water wells and surface water sources throughout California. Perchlorate also has been detected in Metropolitan's Colorado River water supplies. A chemical manufacturing facility near Lake Mead in Nevada is a primary source of the contamination. Remediation efforts began in 1998 and have been successful at meeting the cleanup objectives, significantly reducing the levels of perchlorate entering into the Colorado River. CDPH has established a primary drinking water standard (i.e., an MCL) of 6 ppb for perchlorate. Current perchlorate levels in Metropolitan's Colorado River supplies are below 2 ppb.

Chromium 6. Hexavalent chromium or chromium 6 is one of several forms of chromium that occur in natural waters in the environment. Chromium 6 is the relatively more harmful form of chromium that is regulated under the public health standard MCL of 50 ppb for "total" chromium. ~~There is currently no specific MCL for chromium 6. However, the~~The California Department of Public Health filed the final regulation for chromium 6 on April 15, 2014, setting a new MCL of 10 ppb. ~~Based on the filing date, it is anticipated that the~~The new MCL ~~will become~~became effective July 1, 2014, and ~~that~~ water utilities will be required to comply with such MCL by the end of 2015. Since monitoring began in 1998, chromium 6 in Metropolitan's treated water has ranged from non-detect (less than 0.03 ppb) to less than 1 ppb. Metropolitan expects that the ~~adoption of a~~recently adopted chromium 6 regulation will not materially affect the water supply to Metropolitan or result in significant compliance costs.

Arsenic. The federal and state MCL for arsenic in drinking water is 10 ppb. Arsenic levels in Metropolitan's treated water supplies ranged from not detected (less than 2 ppb) to 2.7 ppb in 2012, which is within the historically expected range.

Seismic Considerations

General. Although the magnitude of damages resulting from a significant seismic event are impossible to predict, Metropolitan's water conveyance and distribution facilities are designed to either withstand a maximum probable seismic event or to minimize the potential repair time in the event of damage. The five pumping plants on the Colorado River Aqueduct have been buttressed to better withstand seismic events. Other components of the Colorado River Aqueduct are monitored for any necessary rehabilitation and repair. Metropolitan personnel and independent consultants periodically reevaluate the internal water distribution system's vulnerability to earthquakes. As facilities are evaluated and identified for seismic retrofitting, they are prioritized, with those facilities necessary for delivering or treating water scheduled for upgrade before non-critical facilities. However, major portions of the California Aqueduct and the Colorado River Aqueduct are located near major earthquake faults, including the San Andreas Fault. A significant earthquake could damage structures and interrupt the supply of water, adversely affecting Metropolitan's revenues and its ability to pay its obligations. Therefore, emergency supplies are stored for use throughout Metropolitan's service area, and a six-month reserve supply of water normally held in local storage (including emergency storage in Diamond Valley Lake) provides reasonable assurance of continuing water supplies during and after such events.

Metropolitan has an ongoing surveillance program that monitors the safety and structural performance of its 14 dams and reservoirs. Operating personnel perform regular inspections that include monitoring and analyzing seepage flows and pressures. Engineers responsible for dam safety review the inspection data and monitor the horizontal and vertical movements for each dam. Major on-site inspections are performed at least twice each year. Instruments that transmit seismic acceleration time histories for analysis any time a dam is subjected to strong motion during an earthquake are located at a number of selected sites.

In addition, Metropolitan has developed an emergency plan that calls for specific levels of response appropriate to an earthquake's magnitude and location. Included in this plan are various communication tools as well as a structured plan of management that varies with the severity of the event. Pre-designated personnel follow detailed steps for field facility inspection and distribution system patrol. Approximately 40 employees are designated to respond immediately under certain identifiable seismic events. An emergency operations center is maintained at the OCC. The OCC, which is specifically designed to be earthquake resistant, contains communication equipment, including a radio transmitter, microwave capability and a response line linking Metropolitan with its member agencies, DWR, other utilities and the State's Office of Emergency Services.

Metropolitan also maintains machine, fabrication and coating shops at its facility in La Verne, California. Several construction contracts have been completed over the last few years to upgrade and expand these shops. A total of nearly \$37 million has been invested to enhance Metropolitan's capacity to not only provide fabrication and coating services for planned rehabilitation work, maintenance activities, and capital projects, but to also perform emergency fabrication support to Metropolitan and its member agencies. Metropolitan has also maintained reimbursable agreements with DWR to perform machining, fabrication, and coating services for critical repair and rehabilitation of State Water Project facilities. These agreements have enhanced timely and cost-effective emergency response capabilities. Materials to fabricate pipe and other appurtenant fittings are kept in inventory at the La Verne site. In the event of earthquake damage, Metropolitan has taken measures to provide the design and fabrication capacity to fabricate pipe and related fittings. Metropolitan is also staffed to perform emergency repairs and has pre-qualified contractors for emergency repair needs at various locations throughout Metropolitan's service area.

State Water Project Facilities. The California Aqueduct crosses all major faults either by canal at ground level or by pipeline at very shallow depths to ease repair in case of damage from movement along a fault. State Water Project facilities are designed to withstand major earthquakes along a local fault or magnitude 8.1 earthquakes along the San Andreas Fault without major damage. Dams, for example, are designed to accommodate movement along their foundations and to resist earthquake forces on their embankments. Earthquake loads have been taken into consideration in the design of project structures such as pumping and power plants. The location of check structures on the canal allows for hydraulic isolation of the fault-crossing repair.

While the dams, canals, pump stations and other constructed State Water Project facilities have been designed to withstand earthquake forces, the critical supply of water from Northern California must traverse the Bay-Delta through hundreds of miles of varying levels of engineered levees that are susceptible to major failures due to flood and seismic risk. In the event of a failure of the Bay-Delta levees, the quality of the Bay-Delta's water could be severely compromised as salt water comes in from the San Francisco Bay. Metropolitan's supply of State Water Project water would be adversely impacted if pumps that move Bay-Delta water southward to the Central Valley and Southern California are shut down to contain the salt water intrusion. Metropolitan estimates that stored water supplies, Colorado River Aqueduct supplies and local water resources that would be available in case of a levee breach or other interruption in State Water Project supplies would meet demands in Metropolitan's service area for approximately twelve months. See "METROPOLITAN'S WATER SUPPLY—Storage Capacity and Water in Storage" in this Appendix A. Since the State and Federal governments control the Bay-Delta levees, repair of any levee failures would be the responsibility of and controlled by the State and Federal governments.

Metropolitan, in cooperation with the State Water Contractors, developed recommendations to DWR for emergency preparedness measures to maintain continuity in export water supplies and water quality during emergency events. These measures include improvements to emergency construction materials stockpiles in the Bay-Delta, improved emergency contracting capabilities, strategic levee improvements and other structural measures of importance to Bay-Delta water export interests, including development of an emergency freshwater pathway to export facilities in a severe earthquake. DWR utilized \$12 million in fiscal

year 2007-08 for initial stockpiling of rock for emergency levee repairs and development of Bay-Delta land and marine loading facilities and has identified future funding for expanded stockpiles.

Perris Dam. Perris Dam forms Lake Perris, the terminal reservoir for the State Water Project in Riverside County, with maximum capacity of approximately 130,000 acre-feet of water. DWR reported in July 2005 that seismic studies indicate that DWR's Perris Dam facility could sustain damage from moderate earthquakes along the San Jacinto or San Andreas faults due to potential weaknesses in the dam's foundation. ~~The studies used technology not available when the dam was completed in 1974. Perris Dam forms Lake Perris, the terminal reservoir for the State Water Project in Riverside County, with maximum capacity of approximately 130,000 acre-feet of water.~~ In late 2005, DWR lowered the water level in the reservoir by about 25 feet and reduced the amount of water stored in the reservoir to about 75,000 acre-feet as DWR ~~evaluates~~evaluated alternatives for repair of the dam. ~~The lower lake level elevation was intended to prevent over-topping of the dam crest in the event of a major earthquake and to prevent uncontrolled releases.~~ In December 2006, DWR completed a study identifying various repair options, began additional geologic exploration along the base of Perris Dam and started preliminary design. DWR's preferred alternative is to repair the dam to restore the reservoir to its historical level. ~~DWR released its draft EIR in January 2010 and final EIR in September 2011.~~ On November 11, 2011, DWR certified the final EIR and filed a Notice of Determination stating its intent to proceed with the preferred alternative. ~~Since that time, DWR has narrowed its scope of work and refined its cost estimates for this project. DWR now estimates that such~~DWR estimates that repairs will cost approximately \$141 million with commencement of construction anticipated in 2014 and completion in mid-2017. Under the original allocation of joint costs for this facility, the State would have paid approximately six percent of the repair costs. However, because of the recreational benefit this facility provides to the public, the Legislature has approved a recommendation from DWR that the State assume ~~a greater percentage of these repairs costs, namely~~ 32.2 percent of these repair costs. The remaining 67.8 percent of repairs costs will be paid for by the three agencies that use the water stored in Lake Perris: Metropolitan (42.9 percent), Desert Water Agency (3.0 percent) and Coachella Valley Water District (21.9 percent). See "METROPOLITAN EXPENDITURES—State Water Contract Obligations" in this Appendix A.

Security Measures

Metropolitan conducts ground and air patrols of the Colorado River Aqueduct and monitoring and testing at all treatment plants and along the Colorado River Aqueduct. Similarly, DWR has in place security measures to protect critical facilities of the State Water Project, including both ground and air patrols of the State Water Project.

Although Metropolitan has constructed redundant systems and other safeguards to ensure its ability to continually deliver water to its customers, and DWR has made similar efforts, a terrorist attack or other security breach against water facilities could materially impair Metropolitan's ability to deliver water to its customers, its operations and revenues and its ability to pay its obligations.

CAPITAL INVESTMENT PLAN

General Description

Metropolitan's current Capital Investment Plan (the "Capital Investment Plan" or "CIP") involves expansion and rehabilitation of existing facilities and construction of new facilities to meet future water demands, ensure system reliability as well as enhance operational efficiency and flexibility, and comply with water quality regulations. Metropolitan's CIP is regularly reviewed and updated. Implementation and construction of specific elements of the program are subject to Board approval, and the amount and timing of borrowings will depend upon, among other factors, status of construction activity and water demands within

Metropolitan's service area. From time to time projects that have been undertaken are delayed, redesigned or deferred by Metropolitan for various reasons and no assurance can be given that a project in the CIP will be completed in accordance with its original schedule or that any project will be completed as currently planned.

Projection of Capital Investment Plan Expenditures

The table below sets forth the projected CIP expenditures in the adopted biennial budget for fiscal years 2014-15 and 2015-16, including replacement and refurbishment expenditures, by project type for the fiscal years ending June 30, 2015 through 2019. This estimate is updated bi-annually as a result of the periodic review and ~~revision~~ adoption of the ~~CIP~~ capital budget by Metropolitan's Board of Directors. See "HISTORICAL AND PROJECTED REVENUES AND EXPENSES" in this Appendix A.

CAPITAL INVESTMENT PLAN PROJECTION OF EXPENDITURES^{(1) (2) (3)} (Fiscal Years Ended June 30 - Dollars in Thousands)

<u>Cost of Service</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>Total</u>
Source of Supply	\$27,193	\$22,311	\$27,168	\$46,281	\$46,119	\$169,071
Conveyance & Aqueduct	12,244	12,562	1,999	-46,281	-46,119	26,805
Storage	7,193	311	168	-	-	9,072
	12,244	12,562	1,999	-	-	26,805
	43	51,642	69,826	112,699	135,673	413,349
Storage Distribution	508	43,508	8			3,348
Administrative & General	8,212	2,308	4,067	487	120	15,174
Distribution Treatment	126,149	148,652	121,390	95,124	79,270	570,585
Treatment Administrative and General	28,109	30,393	50,357	26,484	23,214	158,558
Hydroelectric	8,212	2,308	4,067	467	120	15,174
Total⁽²⁾	\$245,415	\$267,868	\$274,807	\$281,055	\$284,396	\$1,353,542

Source: Metropolitan.

- (1) Fiscal year 2014-15 through 2018-19 based on the adopted biennial budget for fiscal years 2014-15 and 2015-16. Totals are rounded.
- (2) Annual totals include replacement and refurbishment expenditures for fiscal years 2014-15 through 2018-19 of \$139 million, \$162 million, \$159 million, \$223 million, and \$250 million, respectively, for a total of \$932 million for fiscal years 2014-15 through 2018-19.
- ~~(3) Based upon actual operations through March 31, 2014 and revised projections through June 2014, CIP expenditures for fiscal year 2013-14 are projected to be \$175 million, compared to a budget of \$295 million. These variances are attributed to significant cost savings for a single under-budget construction contract, lower than anticipated contract progress payments, and efforts to optimize design and construction scheduling while maintaining reliable service.~~

The above projections do not include amounts for contingencies, but include escalation at 2.77 percent per year for projects for which formal construction contracts have not been awarded. Additional capital costs may arise in the future as a result of, among other things, federal and State water quality regulations, project changes and mitigation measures necessary to satisfy environmental and regulatory

requirements, and for additional facilities. See “METROPOLITAN’S WATER DELIVERY SYSTEM—Water Treatment” in this Appendix A.

Capital Investment Plan Financing

The CIP will require funding from debt financing (see “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A) as well as from pay-as-you-go funding. The Board has adopted an internal funding objective to fund all capital program expenditures required for replacements and refurbishments of Metropolitan facilities from current revenues. However, in order to reduce drawdowns of reserve balances and to mitigate financial risks that could occur in upcoming years, actual ~~and projected~~ pay-as-you-go funding has been less than projected amounts during fiscal years 2007-08 through 2012-13. During this period, pay-as-you-go funding was reduced to \$256 million, rather than the \$521 million originally projected ~~for this period~~. For fiscal year 2013-14, the pay-as-you-go funding for the capital program ~~is projected to be \$150 million. However, based on improved financial operations in FY 2013-14, pay as you go funding levels are projected to increase. As approved by Metropolitan’s Board, on April 8, 2014, the biennial budget for FY 2014-15 and FY 2015-16 includes~~ was \$117 million. On April 8, 2014, Metropolitan’s Board approved a total of \$466 million for pay-as-you-go expenditures, ~~which will fund the total CIP expenditures for those years. as part of the biennial budget for fiscal year 2014-15 and fiscal year 2015-16. These pay-as-you-go funds, together with funds available in the Replacement and Refurbishment Fund, are expected to fund \$513 million in CIP expenditures for fiscal year 2014-15 and fiscal year 2015-16.~~ As in prior years, pay-as-you-go funding may be reduced or increased by the Board during the fiscal year. To limit the accumulation of cash and investments in the Replacement and Refurbishment Fund, the maximum balance in this fund at the end of each fiscal year will be \$160 million. Amounts above the \$160 million limit will be transferred to the Revenue Remainder Fund and may be used for any lawful purpose. See “METROPOLITAN REVENUES—Financial Reserve Policy” in this Appendix A. The remainder of capital program expenditures will be funded through the issuance from time to time of water revenue bonds, which are payable from Net Operating Revenues. Metropolitan’s budget assumptions for the adopted biennial budget for fiscal years 2014-15 and 2015-16 provide for the issuance of no additional water revenue bonds to fund the CIP in fiscal years 2014-15 through 2016-17, \$40 million of water revenue bonds in fiscal year 2017-18, and \$100 million of water revenue bonds in fiscal year 2018-19.

Major Projects of Metropolitan’s Capital Investment Plan

Oxidation Retrofit Facilities. The oxidation retrofit facilities program includes the design and construction of oxidation facilities and appurtenances at all of Metropolitan’s treatment plants. This program is intended to allow Metropolitan to meet drinking water standards for disinfection by-products and reduce taste and odor incidents. The first phase of the oxidation retrofit program, at Metropolitan’s Henry J. Mills Treatment Plant in Riverside County, was completed in 2003. Oxidation retrofit at the Joseph Jensen Treatment Plant was completed July 1, 2005. The cost for these two projects was approximately \$236.4 million. Oxidation retrofit at the Robert A. Skinner plant was substantially completed in December 2009 and operational in 2010, with follow-up work ~~expected for completion~~ completed in June 2014. Expenditures at the Skinner plant through ~~December 2013~~ June 2014 were ~~\$242.95~~ \$243.3 million. Total oxidation program costs at the Skinner plant are estimated to be \$245.5 million. Construction of the oxidation retrofit facilities at the Robert B. Diemer Treatment Plant was completed in June 2013. All testing and start-up work is planned to be complete in ~~2014~~ 2015. Program expenditures at the Diemer plant through ~~December 2013~~ June 2014 were ~~\$355.1~~ \$357.4 million and the total program cost is projected to be ~~\$372.9~~ \$370.0 million. The construction contract for the Weymouth oxidation facilities, the last Metropolitan treatment plant to be retrofitted, was awarded in June 2012. Oxidation program costs at the F.E. Weymouth plant, based upon the adopted budget, were estimated to be \$338.5 million. Due to the ongoing highly competitive bidding environment, the awarded construction contract was more than \$100 million below the budgeted amount. Expenditures at the Weymouth plant through ~~December 2013~~ June 2014 were ~~\$118.8~~ \$141.9 million and

completion is expected in fiscal year 2016-17. Total oxidation program costs at the F.E. Weymouth plant are estimated to be \$270.0 million.

F.E. Weymouth Treatment Plant Improvements. The F.E. Weymouth Treatment Plant was built in 1938 and subsequently expanded several times over the following 25 years. It is Metropolitan's oldest water treatment facility. Metropolitan has completed several upgrades and refurbishment/replacement projects to maintain the plant's reliability and improve its efficiency. These include power systems upgrades, a residual solids dewatering facility, refurbishment/replacement of the mechanical equipment in two of the eight flocculation and settling basins, a new plant maintenance facility, new chemical feed systems and storage tanks, replacement of the plant domestic/fire water system, seismic upgrades to the plant inlet structure, and a new chlorine handling and containment facility. Planned projects over the next several years include refurbishment of the plant's filters and settling basins, seismic retrofits to the filter buildings and administration building, and replacement of the valves used to control filter operation. The cost estimate for all prior and projected improvements at the Weymouth plant, not including the ozone facilities, is approximately ~~\$442.0~~422.1 million, with ~~\$191.0~~197.7 million spent through ~~December 2013~~June 2014. Budgeted aggregate capital expenditures for improvements at the Weymouth plant for fiscal years 2014-15 and 2015-16 are ~~\$42.3~~42.8 million.

Robert B. Diemer Treatment Plant Improvements. The Robert B. Diemer Treatment Plant was built in 1963 and subsequently expanded in 1968. It is Metropolitan's second oldest water treatment facility and has a capacity to treat 520 million gallons of water a day. Several upgrades and refurbishment/replacement projects have been completed at the Diemer plant, including power system upgrades, a new residual solids dewatering facility, new vehicle and plant maintenance facilities, new chemical feed systems and storage tanks, a new chlorine handling and containment facility, construction of a roller-compacted concrete slope stabilization system and a new secondary access road. Planned projects over the next several years include refurbishment of the plant's settling basins, seismic retrofits to the filter buildings and administration building, and replacement of the valves used to control filter operation. The current cost estimate for all prior and projected improvements at the Diemer Treatment Plant, not including the ozone facilities, is approximately ~~\$384.3~~384.6 million, with ~~\$183.6~~189.4 million spent through ~~December 2013~~June 2014. Budgeted aggregate capital expenditures for improvements at the Diemer plant for fiscal years 2014-15 and 2015-16 are \$59.4 million.

Colorado River Aqueduct Facilities. Deliveries through the Colorado River Aqueduct began in 1941. Through annual inspections and maintenance activities, the performance and reliability of the various components of the Colorado River Aqueduct are regularly evaluated. A major overhaul of the pump units at the five pumping plants was completed in 1988. Refurbishment or replacement of many of the electrical system components, including the transformers, circuit breakers and motor control centers, is currently under way. Projects completed over the past 10 years include replacement of high voltage circuit breakers and transformers at the five pumping plant switchyards, refurbishment of operators and power centers on the head gates downstream of the pumping plants, refurbishment/replacement of 15 isolation/control gates, replacement of cast iron pipe and other components at over 200 outlet structures with stainless steel components, replacement of pumping plant inlet trash racks, ~~and~~ replacement of several miles of deteriorated concrete canal liner, and replacement of the outlet gates and appurtenant electrical, mechanical, and control systems at the Copper Basin Reservoir. Additionally, many of the mechanical components at ~~the all five~~ pumping plants ~~as well as the Copper Basin and Gene Wash Reservoirs~~ will be evaluated and replaced or refurbished over the next ~~few~~several years. The currently projected cost estimate for all prior and planned refurbishment or replacement projects is ~~\$285.8~~468.2 million. Costs through ~~December 2013~~June 2014 were ~~\$161.0~~167.3 million. Budgeted aggregate capital expenditures for improvements on the Colorado River Aqueduct for fiscal years 2014-15 and 2015-16 are \$53.3 million.

Distribution System – Prestressed Concrete Cylinder Pipe. Metropolitan's distribution system (see "METROPOLITAN'S WATER DELIVERY SYSTEM" in this Appendix A) is comprised of approximately 830 miles of pipelines ranging in diameter from 30 inches to over 200 inches. 163 miles of the distribution

system is made up of prestressed concrete cylinder pipe (“PCCP”). In response to PCCP failures experienced by several water agencies, Metropolitan initiated the PCCP Assessment Program in December 1996 to evaluate the condition of Metropolitan’s PCCP lines and investigate inspection and refurbishment methods. As a result, Metropolitan has identified and made repairs to several sections of PCCP. The costs for these repairs to date have totaled nearly \$60 million. Rather than continue to make spot repairs to pipe segments, Metropolitan has initiated a long-term capital program to rehabilitate approximately 100 miles of PCCP in five pipelines. This rehabilitation, which is currently planned to consist of relining the pipelines with a steel liner, will be performed in stages to minimize delivery impacts to customers. The first PCCP line planned for relining is the Second Lower Feeder. Approximately 30 miles of this line are constructed of PCCP, with diameters ranging from 78 to 84 inches. This effort is anticipated to take 8 to 10 years to complete at a cost of approximately ~~\$520~~\$500 million. Preliminary design is currently underway. Design for rehabilitation of the remaining four pipelines will be initiated over the next several years. The estimated cost to reline all 100 miles of PCCP is approximately \$2.6 billion.

Distribution System – Refurbishments and Improvements. In addition to the long-term program to rehabilitate Metropolitan’s PCCP lines, several other components of the distribution system are being refurbished and/or improved. Past and ongoing projects to ensure the reliability of the distribution system, primarily due to age, include multiple replacements or refurbishments of isolation and control valves and gates, refurbishment to pressure control and hydroelectric power facilities, and various other upgrades totaling over \$140 million since fiscal year 2000-01. The currently projected cost estimate for the prior and planned refurbishment or replacement projects is \$600 million. Budgeted aggregate capital expenditures for improvements on the distribution system other than PCCP rehabilitation for fiscal years 2014-15 and 2015-16 are \$53.4 million.

Also, as a result of the current statewide drought, Metropolitan initiated a project to enable reverse-flow through a series of existing pipelines to deliver water stored in Diamond Valley Lake to Metropolitan’s Henry J. Mills Water Treatment Plant, which has historically received only raw water from DWR’s State Water Project. Construction contracts were awarded in June and August 2014 to complete this effort. The total estimated cost for this project is approximately \$37 million. It is planned to be completed by May 2015.

GOVERNANCE AND MANAGEMENT

Board of Directors

Metropolitan is governed by a 37-member Board of Directors. Each member public agency is entitled to have at least one representative on the Board, plus an additional representative for each full five percent of the total assessed valuation of property in Metropolitan’s service area that is within the member public agency. Changes in relative assessed valuation do not terminate any director’s term. Accordingly, the Board may, from time to time, have more than 37 directors.

The Board includes business, professional and civic leaders. Directors serve on the Board without compensation from Metropolitan. Voting is based on assessed valuation, with each member agency being entitled to cast one vote for each \$10 million or major fractional part of \$10 million of assessed valuation of property within the member agency, as shown by the assessment records of the county in which the member agency is located. The Board administers its policies through the Metropolitan Water District Administrative Code (the “Administrative Code”), which was adopted by the Board in 1977. The Administrative Code is periodically amended to reflect new policies or changes in existing policies that occur from time to time.

Management

Metropolitan's day-to-day management is under the direction of its General Manager, who serves at the pleasure of the Board, as do Metropolitan's General Counsel, General Auditor and Ethics Officer. Following is a biographical summary of Metropolitan's principal executive officers.

Jeffrey Kightlinger, General Manager – Mr. Kightlinger was appointed as General Manager in February 2006, leaving the position of General Counsel, which he had held since February 2002. Before becoming General Counsel, Mr. Kightlinger was a Deputy General Counsel and then Assistant General Counsel, representing Metropolitan primarily on Colorado River matters, environmental issues, water rights and a number of Metropolitan's water transfer and storage programs. Prior to joining Metropolitan in 1995, Mr. Kightlinger worked in private practice representing numerous public agencies including municipalities, redevelopment agencies and special districts. Mr. Kightlinger earned his bachelor's degree in history from the University of California, Berkeley, and his law degree from Santa Clara University.

Marcia Scully, General Counsel – Ms. Scully assumed the position of General Counsel in March 2012. She previously served as Metropolitan's Interim General Counsel from March 2011 to March 2012. Ms. Scully joined Metropolitan in 1995, after a decade of private law practice, providing legal representation to Metropolitan on construction, employment, Colorado River and significant litigation matters. From 1981 to 1985 she was assistant city attorney for the City of Inglewood. Ms. Scully served as president of University of Michigan's Alumnae Club of Los Angeles and is a recipient of the 1996 State Bar of California, District 7 President's Pro Bono Service Award and the Southern California Association of Non-Profit Housing Advocate of the Year Award. She is also a member of the League of Women Voters for Whittier and was appointed for two terms on the City of Whittier's Planning Commission, three years of which were served as chair. Ms. Scully earned a bachelor's degree in liberal arts from the University of Michigan, a master's degree in urban planning from Wayne State University and law degree from Loyola Law School.

Gerald C. Riss, General Auditor – Mr. Riss was appointed as Metropolitan's General Auditor in July 2002 and is responsible for the independent evaluation of the policies, procedures and systems of control throughout Metropolitan. Mr. Riss is a certified fraud examiner, certified financial services auditor and certified risk professional with more than 25 years of experience in accounting, audit and risk management. Prior to joining Metropolitan, Mr. Riss was Vice President and Assistant Division Head of Risk Management Administration at United California Bank/Bank of the West. He also served as Senior Vice President, director of Risk Management and General Auditor of Tokai Bank of California from 1988 until its reorganization as United California Bank in 2001. He earned a bachelor's degree in accounting and master's degree in business administration from Wayne State University in Detroit, Michigan.

Deena Ghaly, Ethics Officer – Ms. Ghaly was appointed Ethics Officer in November 2012. Ms. Ghaly joined Metropolitan with over 20 years of legal and ethics-related experience. Prior to joining Metropolitan, she served as an administrative law judge for the California Office of Administrative Hearings. She previously was head of enforcement and general counsel for the Los Angeles City Ethics Commission, which administers and enforces the laws regarding campaign contributions, lobbying, and government ethics for the city of Los Angeles. Before moving to Southern California in 2001, Ms. Ghaly lived and worked in New York City, where she headed the labor department in the general counsel's office of a large city agency. Licensed to practice law in California, New York and New Jersey, Ms. Ghaly is knowledgeable in workplace investigations, government ethics, regulatory affairs, and labor and employment matters. She has lectured throughout the nation on various topics, including parallel criminal and administrative prosecution, due process in administrative procedures, and effective internal investigations. Ms. Ghaly earned a bachelor's degree in philosophy from Wellesley College in Massachusetts and a law degree from Cornell Law School.

Gary Breaux, Assistant General Manager/Chief Financial Officer – Mr. Breaux has had extensive experience working for local governments since 1983. From 1994 until joining Metropolitan in October 2011, he served as Director of Finance for East Bay Municipal Utility District (“EBMUD”). At EBMUD, he was responsible for all financial areas, including treasury operations, debt management, rates, internal audit, accounting and reporting, risk management and customer and community services. Prior to joining EBMUD, he was Director of Finance for the City of Oakland, California. A native of Colorado, Mr. Breaux received a Bachelor of Science degree in Business from the University of Colorado in 1977 and a master’s degree in Public Administration in 1987 from Virginia Commonwealth University.

Debra Man, Assistant General Manager/Chief Operating Officer – Ms. Man was appointed to this position in December 2003. Ms. Man has worked at Metropolitan since 1986, beginning as an engineer and advancing to Chief of the Planning and Resources Division. As Chief of Planning and Resources she was responsible for major initiatives adopted by Metropolitan’s Board, such as the Integrated Water Resources Plan, rate structure, and facility plans for expansion of Metropolitan’s distribution system. In 1999, she was appointed as Vice President of Water Transfers and Exchanges, responsible for securing water supplies through agreements and partnerships with other water and agricultural interests in San Joaquin Valley and Southern California and demonstrating Metropolitan’s water supply reliability in compliance with current laws. Ms. Man is a registered professional civil engineer in California and Hawaii. She has a master’s degree in civil/environmental engineering from Stanford University and a bachelor’s degree in civil engineering from the University of Hawaii.

Roger Patterson, Assistant General Manager/Strategic Initiatives – Mr. Patterson was appointed Assistant General Manager in March 2006. He is responsible for overseeing water supply and planning issues, including the Colorado River and State Water Project. He previously served as a consultant to Metropolitan on Colorado River issues. Mr. Patterson was the director of the Nebraska Department of Natural Resources from 1999 to 2005, where he was responsible for water administration, water planning, flood-plain delineation, dam safety and the state databank. Prior to his work in Nebraska, Mr. Patterson spent 25 years with the Bureau of Reclamation, retiring from the Bureau as the Regional Director for the Mid-Pacific Region. He is a registered professional engineer in Nebraska and Colorado, and earned bachelor’s and master’s degrees in engineering from the University of Nebraska.

Gilbert F. Ivey, Assistant General Manager/Chief Administrative Officer – Mr. Ivey is the Chief Administrative Officer and is responsible for human resources, real property management, strategic land development and Metropolitan’s small business program. Mr. Ivey has been with Metropolitan for 40 years, starting as a summer trainee in the Engineering Division. He has held various positions in Finance, Right-of-Way and Land, Operation, Human Resources and Executive Offices. He earned a bachelor’s degree in business administration from California State University, Dominguez Hills and holds various professional designations and certifications in management from Pepperdine University and the University of Southern California.

Dee Zinke, Deputy General Manager/External Affairs – Ms. Zinke is responsible for Metropolitan’s communications, outreach, education and legislative matters. She joined Metropolitan in 2009 as Manager of the Legislative Services Section. Before coming to Metropolitan, Ms. Zinke was the Manager of Governmental and Legislative Affairs at the Calleguas Municipal Water District for nearly 10 years, where she received recognition for her significant contributions to the Association of California Water Agencies, the Ventura County Special Districts Association and the Association of Water Agencies of Ventura County. During her tenure at Calleguas, she was named Chair of the Ventura County Watersheds Coalition and appointed by then-Secretary of Resources Mike Chrisman to the State Watershed Advisory Committee, a post she still holds today. Prior to her public service, she worked in the private sector as the Executive Officer and Senior Legislative Advocate for Building Industry Association of Greater Los Angeles and Ventura Counties and as Director of Communications for E-Systems, a defense contractor specializing in communication, surveillance and navigation systems in Washington, D.C. Ms. Zinke holds a Bachelor of Arts degree in Communication and Psychology from Virginia Polytechnic Institute and State University.

Employee Relations

The total number of regular full-time Metropolitan employees on ~~April 1, October 15,~~ 2014 was ~~1,745,1,768,~~ of whom ~~1,221,1,238~~ were represented by AFSCME Local 1902, ~~9891~~ by the Supervisors Association, ~~274288~~ by the Management and Professional Employees Association and ~~136135~~ by the Association of Confidential Employees. The remaining 16 employees are unrepresented. The four bargaining units represent 99 percent of Metropolitan's employees. The Memorandum of Understanding ("MOU") with the Association of Confidential Employees covers the period January 1, 2011 through December 31, 2015. The MOUs with the Management and Professional Employees Association and with AFSCME Local 1902 cover the period January 1, 2011 to December 31, 2016. The MOU with the Supervisors Association covers the period September 13, 2011 to December 31, 2016.

Risk Management

Metropolitan is exposed to various risks of loss related to the design, construction, treatment and delivery of water. With the assistance of third party claims administrators, Metropolitan is self-insured for liability, property and workers' compensation. Metropolitan self-insures the first \$25 million per liability occurrence, with commercial liability coverage of \$75 million in excess of the self-insured retention. The \$25 million self-insured retention is maintained as a separate restricted reserve. Metropolitan is also self-insured for loss or damage to its property, with the \$25 million self-insured retention also being accessible for emergency repairs and Metropolitan property losses. In addition, Metropolitan obtains other excess and specialty insurance coverage such as directors' and officers' liability, fiduciary liability and aircraft hull and liability coverage.

Metropolitan self-insures the first \$5 million for workers' compensation with excess coverage of \$50 million. Metropolitan separately funds remaining workers' compensation and general liability claims arising from the Diamond Valley Lake and early portions of the Inland Feeder construction projects, which were insured through Owner Controlled Insurance Programs ("OCIPs"). The OCIPs for those projects have been concluded. The costs to settle and close the remaining claims for the Diamond Valley Lake and Inland Feeder construction projects are estimated to be \$1 million and \$300,000, respectively.

The self-insurance retentions and reserve levels currently maintained by Metropolitan may be modified by Metropolitan's Board at its sole discretion.

METROPOLITAN REVENUES

General

Until water deliveries began in 1941, Metropolitan's activities were, by necessity, supported entirely through the collection of *ad valorem* property taxes. Since the mid-1980s, water sales revenues have provided approximately 75 to ~~8085~~ percent of total revenues and *ad valorem* property taxes have accounted for about 10 percent of revenues, declining to five percent of revenues in fiscal year 2012-13. The remaining revenues have been derived principally from the sale of hydroelectric power, interest on investments and additional revenue sources (water standby charges and availability of service charges) beginning in 1993. *Ad valorem* taxes do not constitute a part of Operating Revenues and are not available to make payments with respect to the water revenue bonds issued by Metropolitan.

Generally, Metropolitan has constitutional and statutory authority, as well as voter authorization, to levy *ad valorem* property taxes ~~as needed~~ to pay its outstanding general obligation bonds and ~~to satisfy its~~ State Water Contract ~~payments.—Currently,~~ obligations. Beginning in fiscal year 1990-91, *ad valorem* taxes

~~are~~ were applied solely to pay annual debt service on Metropolitan’s general obligation bonds and a small portion of State Water Contract ~~payments~~ obligations, pursuant to ~~MWD Act~~ requirements in the Act that limit property tax collections to the amount necessary to pay annual debt service on Metropolitan’s general obligation bonds plus the portion of its State Water Contract payment obligation attributable to the debt service on State general obligation bonds for facilities benefitting Metropolitan ~~that were outstanding as of 1990-91.~~ Under this requirement, Metropolitan’s *ad valorem* property tax revenue ~~has been decreasing, and will continue to~~ would gradually decrease, as the bonds are retired. However, the ~~MWD~~ Act permits Metropolitan to set aside the prescribed reductions in the tax rate if the Board, following a public hearing with 10 days’ prior written notice to the Speaker of the California Assembly and the President pro Tempore of the Senate, finds that ~~such~~ revenue in excess of the restriction is “essential to the fiscal integrity of the district.” On June 11, 2013, following such ~~a~~ public hearing, the Board adopted a resolution finding that maintaining the *ad valorem* tax rate for fiscal year 2013-14 ~~is~~ was essential to the fiscal integrity of Metropolitan and ~~determining that~~ suspending the tax limit clause in the Act. ~~On August 19, 2014, following the required hearing and notice, the Board adopted a resolution finding that continuing the ad valorem tax limit clause in the MWD Act is suspended~~ rate at the rate levied for fiscal year 2013-14. 14 was essential to the fiscal integrity of Metropolitan and suspending the tax limit clause in the Act. Factors considered by the Board included current and future State Water Contract payment obligations and a balancing of proper mechanisms for funding them, the appropriate mix of property taxes and water rates and charges to enhance Metropolitan’s fiscal stability and a fair distribution of costs across Metropolitan’s service area. On August 20, ~~2013,~~ 2013 and August 19, 2014, the Board adopted ~~a resolution~~ resolutions levying taxes for fiscal ~~year~~ years 2013-14 and 2014-15, respectively, at the tax rate levied for fiscal year 2012-13 (0.0035 percent of assessed valuation, excluding annexation levies).

The basic rate for untreated water for domestic and municipal uses is \$593 per acre-foot for Tier 1 water, effective January 1, 2014. This rate will decrease to \$582 effective January 1, 2015 and increase to \$594 effective January 1, 2016. See “Rate Structure” and “Water Rates by Water Category” below. The *ad valorem* tax rate for Metropolitan purposes has gradually been reduced from a peak equivalent rate of 0.1250 percent of full assessed valuation in fiscal year 1945-46 to 0.0035 percent of full assessed valuation for fiscal year ~~2012-13.~~ See “Rate Structure” below. 2014-15. The rates charged by Metropolitan represent the wholesale cost of Metropolitan water to its member agencies, and not the cost of water to the ultimate consumer. Metropolitan does not exercise control over the rates charged by its member agencies or their subagencies to their customers.

Summary of Receipts by Source

The following table sets forth Metropolitan’s sources of receipts for the five fiscal years ended June 30, ~~2013-2014.~~ The table provides cash basis information, which is unaudited. Audited financial statements for the fiscal years ended June 30, ~~2013-2014~~ and June 30, ~~2012-2013~~ are provided in Appendix B - “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR FISCAL YEARS ENDED JUNE 30, 2013-2014 AND JUNE 30, 2012 AND BASIC FINANCIAL STATEMENTS FOR THE SIX MONTHS ENDED DECEMBER 31, 2013 AND 2012 (UNAUDITED). 2013.”

SUMMARY OF RECEIPTS BY SOURCE⁽¹⁾ Fiscal Years Ended June 30 (Dollars in Millions)

	2009	2010	2011	2012	2013	2014
Water Sales ⁽²⁾	\$ 988.1	\$1,011.1	\$995.6	\$ 1,062.5	\$ 1,250.9	\$1,455.3

Net Tax Collections ⁽³⁾	105.2	97.3	88.0	90.1	96.5	98.4
Additional Revenue Sources ⁽⁴⁾	119.7	135.3	153.5	167.1	174.2	179.8
Interest on Investments	33.7	26.7	18.9	17.8	11.7	14.8
Hydroelectric Power Sales	22.5	18.8	22.1	31.0	26.3	15.2
Other Collections & Trust Funds ⁽⁵⁾	3.1	9.1	61.0	53.6	19.9	20.7
Total Receipts	\$1,272.3	\$1,298.3	\$1,339.1	\$1,422.1	\$1,579.5	\$1,784.2

Source: Metropolitan.

- (1) Does not include any proceeds from the sale of bonded indebtedness.
- (2) Gross receipts in each year are for sales in the twelve months ended April 30 of such year. Water sales revenues include revenues from water wheeling and exchanges. See “METROPOLITAN REVENUES—Wheeling and Exchange Charges” in this Appendix A. Includes \$25.7 million in fiscal year 2010-11, from the Calleguas Municipal Water District related to termination of the Las Posas water storage program.
- (3) *Ad valorem* taxes levied by Metropolitan are applied solely to the payment of outstanding general obligation bonds of Metropolitan and a portion of State Water Contract payments obligations.
- (4) Includes receipts derived from water standby charges, readiness-to-serve, and capacity charges. See “—Rate Structure” and “—Additional Revenue Components” below.
- (5) In fiscal year 2010-11 includes \$10.8 million reimbursement from State Proposition 13 bond funds and \$28.2 million from the termination of the Las Posas water storage program. In fiscal year 2011-12, includes \$27.5 million from CVWD for delivery of 105,000 acre-feet under an exchange agreement between Metropolitan and CVWD.

Revenue Allocation Policy and Tax Revenues

The Board determines the water revenue requirement for each fiscal year after first projecting the *ad valorem* tax levy for that year. The tax levy for any year is subject to limits imposed by the State Constitution, the Act and Board policy. ~~The tax levy is and to the requirement under the State Water Contract that in the event that Metropolitan fails or is unable to raise sufficient funds by other means, Metropolitan must levy upon all property within its boundaries not exempt from taxation a tax or assessment sufficient to provide for all payments under the State Water Contract. See “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A. From fiscal year 1990-91 through 2012-13, and pursuant to statute, the tax levy was set to not exceed the amount needed to pay debt service on Metropolitan’s general obligation bonds and to satisfy a portion of Metropolitan’s share of the State Water Contract obligation. However, Metropolitan has authority to impose a greater tax levy to pay debt service on the Metropolitan’s general obligation bonds issued by the State to finance the State Water Project. Any deficiency between tax levy receipts and Metropolitan’s share of debt service obligations on general obligation bonded debt issued by the State is expected to be paid from Operating Revenues, as defined in the Master Resolution. See “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A. On June 11, 2013, the Board suspended the tax limit clause in the Act and, for fiscal year 2013-14, maintained the fiscal year 2012-13 *ad valorem* tax rate. See “METROPOLITAN REVENUES—General” above. The State Water Contract requires that in the event that Metropolitan fails or is unable to raise sufficient funds by other means, Metropolitan must levy upon all property within its boundaries not exempt from taxation a tax or assessment sufficient to provide for all payments under the State Water Contract and to satisfy Metropolitan’s State Water Contract obligations in full if, following a public hearing, the Board finds that such revenue is essential to its fiscal integrity. On June 11, 2013 and August 19, 2014, the Board suspended the tax limit clause in the Act and, for fiscal years 2013-14 and 2014-15, maintained the fiscal year 2012-13 *ad valorem* tax rate. See “METROPOLITAN REVENUES—General” above. Any deficiency between tax levy receipts and Metropolitan’s share of debt service obligations on general obligation bonded debt issued by the State is expected to be paid from Operating Revenues, as defined in the Master Resolution.~~

Water Sales Revenues

Authority. Water rates are established by the Board and are not subject to regulation or approval by the Public Utilities Commission of California or by any other local, State or federal agency. In accordance with the Act, water rates must be uniform for like classes of service. Metropolitan has provided three classes of water service: (1) full service; (2) replenishment (discontinued effective December 31, 2012); and (3) interim agricultural (discontinued effective December 31, 2012). See “—Classes of Water Service” below.

No member agency of Metropolitan is obligated to purchase water from Metropolitan. However, 24 of Metropolitan’s 26 member agencies entered into voluntary water supply purchase orders for water purchases, which had initial 10-year terms ending December 31, 2012. Twenty-two of such purchase orders have been extended to December 31, 2014, as described under “—Member Agency Purchase Orders” below. Consumer demand and locally supplied water vary from year to year, resulting in variability in water sales revenues. Metropolitan uses its financial reserves and budgetary tools to manage the financial impact of the variability in revenues due to fluctuations in annual water sales. See “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

Payment Procedure. Water is delivered to the member agencies on demand and is metered at the point of delivery. Member agencies are billed monthly and a late charge of one percent of the delinquent payment is assessed for a payment that is delinquent for no more than five business days. A late charge of two percent of the amount of the delinquent payment is charged for a payment that is delinquent for more than five business days for each month or portion of a month that the payment remains delinquent. Metropolitan has the authority to suspend service to any member agency delinquent for more than 30 days. Delinquencies have been rare; in such instances late charges have been collected. No service has been suspended because of delinquencies.

Water Sales. The following table sets forth the acre-feet of water sold and water sales (including sales from water wheeling and exchanges) for the five fiscal years ended June 30, ~~2013-2014~~. Water sales revenues of Metropolitan for the two fiscal years ended June 30, ~~2013-2014~~ and June 30, ~~2012-2013~~, respectively, on an accrual basis, are shown in Appendix B - “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR FISCAL YEARS ENDED JUNE 30, ~~2013-2014~~ AND JUNE 30, ~~2012-2013~~ AND BASIC FINANCIAL STATEMENTS FOR THE SIX MONTHS ENDED DECEMBER 31, 2013 AND 2012 (UNAUDITED)-2013.”

SUMMARY OF WATER SOLD AND WATER SALES Fiscal Years Ended June 30

<u>Year</u>	<u>Acre-Feet⁽¹⁾ Sold</u>	<u>Water Sales⁽⁴⁾ (in millions)</u>	<u>Dollars Per Acre Foot⁽⁵⁾</u>	<u>Average Dollars Per 1,000 Gallons</u>
2009	2,166,936	\$ 988.1	\$ 456	\$ 1.40
2010	1,857,564	\$1,011.1	\$544	\$1.67
2011 ⁽²⁾	1,632,277	995.6	610	1.87
2012 ⁽³⁾	1,676,855	1,062.5	634	1.94
2013	1,856,685	1,282.5	691	2.12
<u>2014</u>	<u>2,043,720</u>	<u>1,484.6</u>	<u>726</u>	<u>2.23</u>

Source: Metropolitan.

(1) Year ended April 30 for fiscal years ~~2009-2010~~-2012, water sales recorded on a cash-basis. Beginning fiscal year 2012-13 water sales recorded on an accrual basis, with water sales for the fiscal year ended June 30.

- (2) Includes the sale of 34,519 acre-feet and the receipt of \$25.7 million from the Calleguas Municipal Water District related to termination of the Las Posas water storage program.
- (3) Includes 225,000 acre-feet of replenishment sales.
- (4) Water Sales in fiscal years ~~2008~~2009-0910 through 2011-12 are recorded on a cash basis for sales in the twelve months ended April 30 of such year, with rates and charges invoiced in May and payable by the last business day of June of each year. Water sales for fiscal ~~years~~ 2012-13 and 2013-14 are recorded on a modified accrual basis for sales in the twelve months ended June 30 of such year, with rates and charges recorded as revenues in the same months as invoiced. Includes revenues from water wheeling and exchanges. See “METROPOLITAN REVENUES—Wheeling and Exchange Charges” in this Appendix A.
- (5) Gross water sales divided by acre-feet sold. An acre-foot is approximately 326,000 gallons. See table entitled “SUMMARY OF WATER RATES” under “-Water Rates by Water Category” below for a description of water rates and classes of service.

Rate Structure

The following rates and charges are elements of Metropolitan’s rate structure for full service water deliveries:

Tier 1 and Tier 2 Water Supply Rates. The Tier 1 and Tier 2 Water Supply Rates are designed to recover Metropolitan’s water supply costs. The Tier 2 Supply Rate is designed to reflect Metropolitan’s costs of acquiring new supplies. Member agencies are charged the Tier 1 or Tier 2 Water Supply Rate for water purchases, as described under “-Member Agency Purchase Orders” below.

System Access Rate. The System Access Rate is intended to recover a portion of the costs associated with the conveyance and distribution system, including capital, operating and maintenance costs. All users (including member agencies and third-party entities wheeling or exchanging water; see “—Wheeling and Exchange Charges” below) of the Metropolitan system pay the System Access Rate.

Water Stewardship Rate. The Water Stewardship Rate is charged on a dollar per acre-foot basis to collect revenues to support Metropolitan’s financial commitment to conservation, water recycling, groundwater recovery and other [water demand](#) management programs approved by the Board. The Water Stewardship Rate is charged for every acre-foot of water conveyed by Metropolitan because all users of Metropolitan’s system benefit from the system capacity made available by investments in demand management programs.

System Power Rate. The System Power Rate is charged on a dollar per acre-foot basis to recover the cost of power necessary to pump water from the State Water Project and Colorado River through the conveyance and distribution system for Metropolitan’s member agencies. The System Power Rate is charged for all Metropolitan supplies. Entities wheeling non-Metropolitan water supplies will pay the actual cost of power to convey water on the State Water Project, the Colorado River Aqueduct or the Metropolitan distribution system, whichever is applicable.

Treatment Surcharge. Metropolitan charges a treatment surcharge on a dollar per acre-foot basis for treated deliveries. The treatment surcharge is set to recover the cost of providing treated water service, including capital and operating cost.

Delta Supply Surcharge. On April 13, 2010, Metropolitan’s Board adopted a Delta Supply Surcharge of \$51 and \$58 per acre-foot, effective January 1, 2011 and January 1, 2012, respectively, and applicable to all Tier 1, Interim Agricultural Water Program and Replenishment water rates. The Delta Supply Surcharge was designed to recover the additional supply costs Metropolitan faces as a result of pumping restrictions associated with the USFWS biological opinion on Delta smelt and other actions to protect endangered fish species. The Delta Surcharge was intended to remain in effect until a long-term solution for the Bay-Delta is achieved. Metropolitan anticipated that the Delta Supply Surcharge would be reduced or suspended as interim Delta improvements ease pumping restrictions, resulting in lower costs for additional supplies. On April 10, 2012, the Board suspended the Delta Supply Surcharge, effective January 1, 2013.

The amount of each of these rates since ~~January~~September 1, ~~2008,2009~~, is shown in the table entitled “SUMMARY OF WATER RATES” under “—Water Rates by Water Category” below.

Litigation Challenging Rate Structure

SDCWA filed *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.* on June 11, 2010. The complaint alleges that the rates adopted by the Board on April 13, 2010, which became effective January 1, ~~2011,2011~~ and January 1, 2012, misallocate State Water Contract costs to the System Access Rate and the System Power Rate, and thus to charges for transportation of water, and that this results in an overcharge to SDCWA by at least \$24.5 million per year. The complaint alleges that all State Water Project costs should be allocated instead to Metropolitan’s Supply Rate, even though under the State Water Contract Metropolitan is billed separately for transportation, power and supply costs. It states additionally that Metropolitan will overcharge SDCWA by another \$5.4 million per year by including the Water Stewardship Rate in transportation charges. Eight of Metropolitan’s member agencies (the Cities of Glendale, Los Angeles and Torrance, Municipal Water District of Orange County and Foothill, Las Virgenes, Three Valleys and West Basin Municipal Water Districts) answered the complaint in support of Metropolitan. IID joined the litigation in support of SDCWA’s challenge to Metropolitan’s charges for transportation of water, but withdrew and dismissed all claims against Metropolitan with prejudice on October 30, 2013.

The complaint requested a court order invalidating the rates and charges adopted April 13, 2010, and that Metropolitan be mandated to allocate costs associated with State Water Project supplies and the Water Stewardship Rate to water supply charges and not to transportation charges. Rates in effect in prior years are not challenged in this lawsuit. Metropolitan contends that its rates are reasonable, equitably apportioned among its member agencies and lawful, and were adopted under a valid rate structure and cost of service approach developed in a multi-year collaborative process with its member agencies that has been in place since 2002. Nevertheless, to the extent that a court invalidates Metropolitan’s adopted rates and charges, Metropolitan will be obligated to reconsider and modify rates and charges to comply with any court rulings related to Metropolitan’s rates. While components of the rate structure and costs may change as a result of any such rulings, Metropolitan expects that aggregate rates and charges would still recover Metropolitan’s cost of service. As such, revenues would not be affected. If Metropolitan's rates are revised in the manner proposed by SDCWA in the complaint, other member agencies may pay higher rates unless other actions are taken by the Board.

SDCWA filed its First Amended Petition for Writ of Mandate and Complaint on October 27, 2011, adding five new claims to this litigation, two of which were eliminated from the case on January 4, 2012. The three remaining new claims are for breach of the water exchange agreement between Metropolitan and SDCWA (described herein under “METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct—*Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*”) based on allegedly illegal calculation of rates; improper exclusion of SDCWA’s payments under this exchange agreement from calculation of SDCWA’s preferential rights to purchase Metropolitan supplies (see “—Preferential Rights” below); and illegality of “rate structure integrity” provisions in conservation and local resources incentive agreements between Metropolitan and SDCWA. Such “rate structure integrity” provisions permit the Board to terminate incentives payable under conservation and local resources incentive agreements between Metropolitan and a member agency due to certain actions by the member agency to challenge the rates that are the source of incentive payments. In June 2011, Metropolitan’s Board authorized termination of two incentive agreements with SDCWA under the “rate structure integrity” provisions in such agreements after SDCWA filed its initial complaint challenging Metropolitan’s rates. SDCWA filed a Second Amended Petition for Writ of Mandate and Complaint on April 17, 2012, which contains additional allegations but no new causes of action.

On June 8, 2012, SDCWA filed a new lawsuit challenging the rates adopted by Metropolitan on April 10, 2012 and effective on January 1, 2013 and January 1, 2014. See “–Rate Structure” above and “–Water Rates by Water Category” below for a description of Metropolitan’s water rate structure and the rates and charges adopted on April 10, 2012. The complaint contains allegations similar to those in the Second Amended Petition for Writ of Mandate and Complaint and new allegations asserting that Metropolitan’s rates, adopted in April 2012, violate Proposition 26. See “–California Ballot Initiatives” below for a description of Proposition 26. Metropolitan contends that its rates adopted on April 10, 2012 are reasonable, equitably apportioned among its member agencies and lawful and were adopted under a valid rate structure and cost of service approach. Ten of Metropolitan’s member agencies (the eight member agency parties to SDCWA’s first lawsuit, Eastern Municipal Water District and Western Municipal Water District of Riverside County) answered the complaint in support of Metropolitan and IID joined the litigation in support of SDCWA.

SDCWA filed a Third Amended Petition for Writ of Mandate and Complaint on January 23, 2013, to add new allegations that Metropolitan’s rates adopted in April 2010 did not meet the requirements of Proposition 26, approved by California voters in November 2010. The court granted Metropolitan’s motion to strike allegations relating to Proposition 26 on March 29, 2013, expressly ruling that SDCWA may not allege a violation of Proposition 26 in its challenge to the rates adopted in April 2010. This ruling does not affect SDCWA’s separate challenge to Metropolitan’s rates adopted in April 2012, which also includes Proposition 26 allegations.

Trial of the first phase of both lawsuits before the Superior Court of California, County of San Francisco (Case Nos. CPF-10-510830 and CPF-12-512466) concluded January 23, 2014. On April 24, 2014, the court issued its “Statement of Decision on Rate Setting Challenges,” determining that SDCWA prevailed on two of its claims and that Metropolitan prevailed on the third claim. Specifically, the court found that there was not sufficient evidence to support Metropolitan’s inclusion in its transportation rates, and hence in its wheeling rate, of either (1) payments it makes to the California Department of Water Resources for the State Water Project, or (2) all of the costs incurred by Metropolitan for conservation and local water supply development programs recovered through the Water Stewardship Rate. [The trial court decision stated that the System Access Rate, System Power Rate, Water Stewardship Rate and wheeling rate violate specified statutes and the common law and such rates effective in 2013 and 2014 violate Proposition 26.](#) The court found that SDCWA failed to prove its “dry-year peaking” claim that Metropolitan’s rates do not adequately account for variations in member agency purchases. SDCWA’s claims asserting breach of the Exchange Agreement and miscalculation of preferential rights will be tried in a second phase of the case. The court ~~sethas scheduled~~ a case management conference for ~~May 16, 2014, to address the substance and timing of next steps in the litigation.~~ [December 2, 2014.](#) The final judgment in the cases will be subject to appeal. Metropolitan is unable to assess at this time the likelihood of success of this litigation, any possible appeal or any future claims.

Due to SDCWA’s litigation challenging Metropolitan’s ~~rate–structure~~ [rates](#), as of ~~March 31, September 30,~~ 2014, Metropolitan held ~~\$126~~ [\\$148](#) million in its financial reserves pursuant to the exchange contract between Metropolitan and SDCWA. See “–Financial Reserve Policy” below. Amounts held pursuant to the ~~exchange agreement~~ [Exchange Agreement](#) will continue to accumulate based on the quantities of exchange water that Metropolitan provides to SDCWA and the amount of charges disputed by SDCWA. Amounts held pursuant to the ~~exchange agreement~~ [Exchange Agreement](#) are transferable to SDCWA to pay any amounts awarded by the court in the event SDCWA prevails in ~~the litigation challenging Metropolitan’s rate–structure~~ [its claim for breach of the Exchange Agreement.](#)

[In May 2014, SDCWA filed a new lawsuit asserting essentially the same rate claims and breach of contract claim in connection with the Board’s April 2014 rate adoption. Metropolitan filed its answer on June 30, 2014. Metropolitan is unable to assess at this time the likelihood of success of this case, any possible appeal or any future claims.](#)

Member Agency Purchase Orders

The current rate structure provides for a member agency's agreement to purchase water from Metropolitan by means of a voluntary purchase order. In consideration of executing its purchase order, each member agency that executed a purchase order and whose purchase order is in effect is allowed to purchase up to 90 percent of its base amount at the Tier 1 Water Supply Rate in any fiscal year during the term of the purchase order, and its base amount will be the greater of (1) its highest firm demand for Metropolitan water in any fiscal year from 1989-90 through 2001-02 or (2) its ten-year rolling average of firm demand for Metropolitan water. Amounts purchased by such agencies over the applicable base amount will be priced at the Tier 2 Water Supply Rate. See "~~—Rate Structure—Tier 1 and Tier 2 Water Supply Rates~~" above. Member agencies that do not have purchase orders in effect are subject to Tier 2 Water Supply Rates for amounts exceeding 60 percent of their base amount (equal to the member agency's highest fiscal year demand between 1989-90 and 2001-02).

Under each purchase order, a member agency agrees to purchase, over the term of the contract, an amount of water equal to at least 60 percent of its highest firm demand for Metropolitan water in any fiscal year from 1989-90 through 2001-02 multiplied by the number of years in the contract. Member agencies are allowed to vary their purchases from year to year, but a member agency will be obligated to pay for the full amount committed under the purchase order, even if it does not take its full purchase order commitment by the end of the contract period.

Twenty-four of Metropolitan's 26 member agencies executed purchase orders for an aggregate of 12.5 million acre-feet of water over the ten years ending December 31, 2012. On November 8, 2011, Metropolitan's Board authorized the General Manager to execute a withdrawal of the City of Compton's Purchase Order committing to purchase 33,720.6 acre-feet over the original ten-year period. The withdrawal was effective January 1, 2003. This lowered Compton's Tier 1 limit as if its Purchase Order had not been executed and Compton will pay the Tier 2 Supply Rate on any future water purchases over the lower limit.

On October 10, 2012, Metropolitan's Board authorized the General Manager to execute an amended and restated purchase order to provide a two-year extension of existing member agency purchase orders, previously set to expire on December 31, 2012. Twenty-two of the 23 remaining purchase orders were extended to December 31, 2014. As of February 1, 2014, all purchase order commitments were met. Extension or replacement of member agency purchase orders is scheduled to be addressed in ~~the second half of~~late 2014.

Classes of Water Service

Full Service Water. Full service water service, formerly known as non-interruptible water service, includes water sold for domestic and municipal uses. Full service treated water rates are the sum of the applicable supply rate, system access rate, water stewardship rate, system power rate and treatment surcharge. Full service untreated water rates are the sum of the applicable supply rate, system access rate, water stewardship rate and system power rate. Full service water sales are the major component of Metropolitan water sales.

Interim Agricultural Water Program. This program provided a discounted rate for agricultural water users that, pursuant to the Act, were permitted to receive only surplus water not needed for domestic or municipal purposes. Metropolitan delivered approximately 40,000 acre-feet of agricultural water under this program in fiscal year 2009-10, approximately 21,000 acre-feet in fiscal year 2010-11 and approximately 29,000 acre-feet in fiscal year 2011-12. On October 14, 2008, the Board approved annual reductions of the Interim Agricultural Water Program discount beginning January 1, 2010 and discontinuance of the program when the discount reached zero on January 1, 2013.

Replenishment. Under the Replenishment Service Program, water was sold at a discounted rate to member agencies, subject to interruption upon notice by Metropolitan. The program allowed Metropolitan to deliver surplus imported water to local groundwater basins and surface storage facilities when supplies were available, with the intent that member agencies could reduce imported water deliveries from Metropolitan during periods of high demand, emergencies or times of shortage. See table entitled “SUMMARY OF WATER RATES” below.

On December 11, 2012, Metropolitan’s Board eliminated the Replenishment Service Program and approved adjustments to increase member agency Tier 1 limits to reflect the historical demand for water used for long-term groundwater and surface storage replenishment. See “—Rate Structure—*Tier 1 and Tier 2 Water Supply Rates*” above. Water for groundwater replenishment now is priced at applicable full service rates. This adjustment provides additional Tier 1 limits for member agencies that historically purchased water for long-term replenishment purposes and limits their exposure to the higher Tier 2 rates. ~~Metropolitan and its member agencies continue discussions of a potential water storage program that would encourage storing water locally and provide regional benefit.~~

Water Rates by Water Category

The following table sets forth Metropolitan’s water rates by category beginning January 1, ~~2008-2010~~. See also “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Revenues” in this Appendix A. In addition to the base rates for untreated water sold in the different classes of service, the columns labeled “Treated” include the surcharge that Metropolitan charges for water treated at its water treatment plants. See “—Rate Structure” and “—Classes of Water Service” above for a description of current rates. See “—Litigation Challenging Rate Structure” above for a description of litigation challenging Metropolitan’s water rates.

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**SUMMARY OF WATER RATES
(Dollars per Acre-Foot)**

	<u>SUPPLY RATE</u>		<u>SYSTEM ACCESS RATE</u>	<u>WATER STEWARDSHIP RATE</u>	<u>SYSTEM POWER RATE</u>	<u>TREATMENT SURCHARGE</u>
	Tier 1	Tier 2				
	September 1, 2009	\$170⁽¹⁾	\$250	\$154	\$41	\$119
January 1, 2010	\$170 ⁽¹⁾	\$280	\$154	\$41	\$119	\$217
January 1, 2011	\$155 ⁽²⁾	\$280	\$204	\$41	\$127	\$217
January 1, 2012	\$164 ⁽²⁾	\$290	\$217	\$43	\$136	\$234
January 1, 2013	\$140 ⁽³⁾	\$290	\$223	\$41	\$189	\$254
January 1, 2014	\$148 ⁽³⁾	\$290	\$243	\$41	\$161	\$297
January 1, 2015*	\$158	\$290	\$257	\$41	\$126	\$341
January 1, 2016*	\$156	\$290	\$259	\$41	\$138	\$348

	<u>FULL SERVICE TREATED⁽⁴⁾</u>		<u>FULL SERVICE UNTREATED⁽⁴⁾</u>		<u>INTERIM AGRICULTURAL PROGRAM</u>		<u>REPLENISHMENT RATE</u>	
	Tier 1	Tier 2	Tier 1	Tier 2	Treated	Untreated	Treated	Untreated
	September 1, 2009	\$701	\$781	\$484	\$564	\$587	\$394	\$558
January 1, 2010	\$701	\$811	\$484	\$594	\$615	\$416	\$558	\$366
January 1, 2011	\$744	\$869	\$527	\$652	\$687	\$482	\$601	\$409
January 1, 2012	\$794	\$920	\$560	\$686	\$765	\$537	\$651	\$442
January 1, 2013*	\$847	\$997	\$593	\$743	**	**	**	**
January 1, 2014*	\$890	\$1,032	\$593	\$735	**	**	**	**
January 1, 2015*	\$923	\$1,055	\$582	\$714	**	**	**	**
January 1, 2016*	\$942	\$1,076	\$594	\$728	**	**	**	**

Source: Metropolitan.

* Rates to be effective January 1, 2015 and January 1, 2016 were adopted by Metropolitan’s Board on April 8, 2014.

** The Interim Agricultural Water Program and Replenishment Service Program were discontinued after 2012.

(1) Includes \$69 per acre-foot Delta Supply Surcharge, which replaced Water Supply Surcharge.

(2) Includes \$51 and \$58 per acre-foot Delta Supply Surcharge for January 1, 2011 and January 1, 2012, respectively.

(3) ~~Excludes Delta Supply Surcharge, which will be suspended for 2013 and 2014.~~(4) Full service treated water rates are the sum of the applicable Supply Rate, System Access Rate, Water Stewardship Rate, System Power Rate and Treatment Surcharge.

(4) Full service untreated water rates are the sum of the applicable Supply Rate, System Access Rate, Water Stewardship Rate and System Power Rate.

Additional Revenue Components

Additional charges for the availability of Metropolitan’s water are:

Readiness-to-Serve Charge. This charge is designed to recover a portion of ~~the principal and interest payments on water revenue bonds issued to fund capital improvements necessary to meet continuing reliability and water quality~~ capital expenditures for infrastructure projects needed to provide standby service, and peak conveyance needs. The Readiness-to-Serve Charge (“RTS”) is allocated to each member agency in proportion to the rolling ten-year share of firm deliveries through Metropolitan’s system. The RTS generated

~~\$119.2 million in fiscal year 2010-11, \$133.9 million in fiscal year 2011-12 and 12, \$144.0 million in fiscal year 2012-13, 13, and \$154.0 million in 2013-14.~~ Based on the adopted rates and charges, the RTS is projected to generate \$162 million in fiscal year 2014-15, and \$155.5 million in fiscal year 2015-16.

Water Standby Charges. The Board is authorized to impose water standby or availability of service charges. In May 1993, the Board imposed a water standby charge for fiscal year 1993-94 ranging from \$6.94 to \$15 for each acre or parcel less than an acre within Metropolitan's service area, subject to specified exempt categories. Water standby charges have been imposed at the same rate in each year since 1993-94. Standby charges are assessments under the terms of Proposition 218, a State constitutional ballot initiative approved by the voters on November 5, 1996. See "—California Ballot Initiatives" below.

Member agencies have the option to utilize Metropolitan's existing standby charge authority as a means to collect all or a portion of their RTS charge. Standby charge collections are credited against the member agencies' RTS charges. See "—Readiness-to-Serve Charge" above. Twenty-two member agencies collect their RTS charges through standby charges. For fiscal years ~~2010-11, 2011-12 and 12, 2012-13, 13, and 2013-14,~~ RTS charges collected by means of such standby charges were \$41.7 million, ~~\$41.7~~41.6 million, and ~~\$41.6~~41.7 million, respectively.

Capacity Charge. The Capacity Charge is a fixed charge intended to recover the cost of providing peak capacity within the distribution system. ~~It is~~ levied on the maximum summer day demand placed on Metropolitan's system between May 1 and September 30 for the three-calendar-year period ended December ~~31, 2010 and December 31, 2011, for charges effective 2012 and 2013 respectively.~~ ~~The Capacity Charge is intended to recover~~31 two years prior to the ~~cost~~date of ~~providing peak~~the capacity ~~within the distribution system.~~charge. Effective January 1, ~~2012, 2014,~~ the Capacity Charge was ~~\$7,400 per cfs of maximum daily flow, which decreased to \$6,400 per cfs on January 1, 2013 and increased to \$8,600 per cfs on January 1, 2014.~~ The adopted Capacity Charge will be \$11,100 per cfs on January 1, 2015, and \$10,900 per cfs on January 1, 2016.

Financial Reserve Policy

Metropolitan's reserve policy currently provides for a minimum unrestricted reserve balance at June 30 of each year that is based on probability studies of the wet periods that affect Metropolitan's water sales. The policy establishes a minimum targeted unrestricted reserve level based on an 18-month revenue shortfall estimate and a target level based on an additional two years revenue shortfall estimate. Funds representing the minimum reserve level are held in the Revenue Remainder Fund, and any funds in excess of the minimum reserve level are held in the Water Rate Stabilization Fund. Metropolitan established the Water Rate Stabilization Fund for the principal purpose of maintaining stable and predictable water rates and charges. Funds above the target reserve level may be utilized for pay-as-you-go funding of capital expenditures, for the redemption, defeasance or purchase of outstanding bonds or for any lawful purpose of Metropolitan, as determined by the Board, provided that Metropolitan's fixed charge coverage ratio, which measures the total coverage of all fixed obligations (which includes all revenue bond debt service obligations, State Water Contract capital payments paid from current year operations and subordinate obligations) after payment of operating expenditures, is at or above ~~1.2, for any lawful purpose of Metropolitan, as determined by the Board.~~1.2. See "CAPITAL INVESTMENT PLAN—Capital Investment Plan Financing" in this Appendix A.

As of June 30, ~~2013, 2014,~~ the minimum reserve requirement was ~~\$198~~202 million. The target reserve ~~limit~~level at June 30, ~~2013, 2014~~ was ~~\$474~~487 million. At June 30, ~~2013, 2014,~~ unrestricted reserves, which consist of the Water Rate Stabilization Fund and the Revenue Remainder Fund, totaled ~~\$536~~487 million on a modified accrual basis, including ~~\$93.1~~137 million held in Metropolitan's financial reserves pursuant to the exchange contract between Metropolitan and SDCWA due to SDCWA's litigation challenging Metropolitan's rate structure. The amount held due to SDCWA's litigation challenging Metropolitan's rate structure as of ~~March 31, September 30,~~ 2014 was ~~\$126~~148 million. See

“METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority” and “METROPOLITAN REVENUES—Litigation Challenging Rate Structure” in this Appendix A. ~~As of June 30, 2013, the fiscal year 2012-13 modified accrual based reserves exclude \$7.2 million held by swap counterparties.~~ Unrestricted reserves in excess of the target reserve level may be used for any lawful purpose of Metropolitan as directed by the Board, provided that Metropolitan’s fixed charge coverage ratio is at or above 1.2. Consistent with State legislation, Metropolitan will ensure that any funds in excess of target reserve levels that are distributed to member agencies will be distributed in proportion to water sales revenues received from each member agency. ~~On June 11, 2013, since reserve balances were projected on a modified accrual basis to be \$75 million greater than the target reserve level at June 30, 2013, the Board authorized the use of the reserve amounts over the target reserve level to be transferred to the Replacement and Refurbishment (PAYGO) Fund for capital projects, a trust to pre-fund Metropolitan’s unfunded liability for other post-employment benefits (see “METROPOLITAN EXPENDITURES—Defined Benefit Pension Plan” in this Appendix A), and the Water Transfer Fund to offset future expenditures for water management actions. These transfers were made prior to June 30, 2013.~~ In addition, Metropolitan maintains various restricted reserves, including reserves for risk retention, operations and maintenance expenses, State Water Contract payments, and other obligations and purposes.

~~On June 30, 2014, Metropolitan’s unrestricted reserves are projected to be \$839 million on a modified accrual basis. This amount of unrestricted reserves would be \$352 million over the target reserve level for FY 2013-14.~~ On April 8, 2014, Metropolitan’s Board approved the use of unrestricted reserves, over the target reserve level, as follows: \$100 million deposit to the ~~Renewal and Replacement~~ Replacement and Refurbishment Fund, for pay-as-you-go funding of the CIP; \$100 million deposited to the Other Post-Employment Benefits (OPEB) Trust; and ~~anythe remaining amounts amount~~ over target (currently estimated at \$150, \$252 million) will be, was placed in a Water Management Fund ~~to, \$232 million of which will~~ cover costs associated with replenishing storage, purchasing transfers and funding drought response programs. ~~In addition, Metropolitan maintains various restricted reserves, including reserves for risk retention, operations and maintenance expenses, State Water Contract payments, and other obligations and purposes, and \$20 million for conservation related programs.~~

Wheeling and Exchange Charges

The process for the delivery of water not owned or controlled by Metropolitan is referred to as “wheeling.” Under the current rate structure, wheeling parties pay the System Access Rate and Water Stewardship Rate, Treatment Surcharge (if applicable) and power costs for wheeling transactions. See “—Rate Structure” above. These payments are included in Net Operating Revenues. Wheeling and exchange revenues totaled ~~\$51.8 million during fiscal year 2010-11,~~ \$89.6 million during fiscal year 2011-12, ~~and \$74.6 million in fiscal year 2012-13-13,~~ and \$81.3 million during fiscal year 2013-14. See “—Litigation Challenging Rate Structure” above for a description of litigation by the SDCWA and IID challenging Metropolitan’s System Access Rate and Water Stewardship Rate.

Hydroelectric Power Recovery Revenues

Metropolitan has constructed 16 small hydroelectric plants on its distribution system. The plants are located in Los Angeles, Orange, Riverside and San Diego Counties at existing pressure control structures and other locations. The combined generating capacity of these plants is approximately 131 megawatts. The total capital cost of these 16 facilities is approximately \$176.1 million. Since 2000, annual energy generation sales revenues have ranged between ~~\$16~~ \$14.6 million and nearly ~~\$30~~ \$29.6 million. Energy generation sales revenues were ~~\$29.6 million for fiscal year 2011-12 and~~ \$24.5 million in fiscal year 2012-~~13-13~~ and \$14.6 million in fiscal year 2013-14.

Principal Customers

All of Metropolitan's regular customers are member agencies. Total water sales to the member agencies accrued for the fiscal year ended June 30, ~~2013~~2014 were ~~1.86~~2.04 million acre-feet, generating \$~~1.28~~1.48 billion in water sales revenues for such period. Metropolitan's ten largest water customers in the year ended June 30, ~~2013~~2014 are shown in the following table, on an accrual basis. On June 11, 2010, the SDCWA filed litigation challenging Metropolitan's rates. See "—Litigation Challenging Rate Structure" above.

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TEN LARGEST WATER CUSTOMERS
Year Ended June 30, ~~2013~~2014
Accrual Basis (~~Unaudited~~Dollars In Millions)

<u>Agency</u>	<u>Water Sales Revenues⁽¹⁾</u>	<u>Percent of Total</u>	<u>Water Sales in Acre-Feet⁽¹⁾</u>	<u>Percent of Total</u>
San Diego County Water Authority	\$ \$ 328,719,613 <u>273,653,937</u>	21.322.1% <u>19.420.7</u>	475,461 <u>545,659</u>	25.626.7 <u>20.921.6</u>
City of Los Angeles	249,365,140 <u>307,294,389</u>	19.420.7 <u>12.912.5</u>	388,402 <u>441,871</u>	20.921.6 <u>11.411.3</u>
MWD of Orange County	165,309,479 <u>185,454,744</u>	12.912.5 <u>7.77.1</u>	211,028 <u>231,941</u>	11.411.3 <u>6.55.9</u>
West Basin MWD	98,246,614 <u>104,897,611</u>	7.77.1 <u>7.06.8</u>	119,870 <u>120,915</u>	6.55.9 <u>5.95.7</u>
Calleguas MWD	90,035,514 <u>101,576,451</u>	7.06.8 <u>5.95.4</u>	109,933 <u>116,685</u>	5.95.7 <u>5.75.0</u>
Eastern MWD	75,323,672 <u>80,499,907</u>	5.95.4 <u>4.44.1</u>	105,296 <u>101,622</u>	5.75.0 <u>4.13.7</u>
Western MWD	56,629,460 <u>60,675,556</u>	4.44.1 <u>3.83.7</u>	75,851 <u>76,194</u>	4.13.7 <u>3.73.5</u>
Three Valleys MWD	48,696,560 <u>55,639,136</u>	3.83.7 <u>2.7</u>	68,586 <u>71,072</u>	3.73.5 <u>3.23.3</u>
Inland Empire Utilities Agency	34,013,542 <u>40,225,028</u>	2.7 <u>2.42.0</u>	59,051 <u>67,833</u>	3.23.3 <u>2.01.7</u>
Central Basin MWD	30,666,963 <u>29,387,772</u>	2.42.0 <u>2.42.0</u>	37,501 <u>33,951</u>	2.01.7 <u>2.01.7</u>
Total	\$ 1,121,940,881 <u>1,294,370,207</u>	% 87.587.2% <u>87.587.2%</u>	1,856,685 1,650,979 <u>1,807,743</u>	% 88.988.5 <u>88.988.5</u>
Total Water Sales Revenues	\$	Total Acre-Feet	1,856,685	

Source: Metropolitan.

(1) Includes wheeling and exchange water sales, revenues and deliveries. See “METROPOLITAN REVENUES—Wheeling and Exchange Charges” in this Appendix A.

Preferential Rights

Section 135 of the Act gives each of Metropolitan’s member agencies a preferential entitlement to purchase a portion of the water served by Metropolitan, based upon a ratio of all payments on tax assessments and otherwise, except purchases of water, made to Metropolitan by the member agency compared to total payments made by all member agencies on tax assessments and otherwise since Metropolitan was formed, except purchases of water. Historically, these rights have not been used in allocating Metropolitan’s water. The California Court of Appeal has upheld Metropolitan’s methodology for calculation of the respective member agencies’ preferential rights under Section 135 of the Act. SDCWA’s litigation challenging Metropolitan’s water rates also challenges Metropolitan’s exclusion of payments for exchange water from the calculation of SDCWA’s preferential right. See “—Litigation Challenging Rate Structure” above.

California Ballot Initiatives

Proposition 218, a State ballot initiative known as the “Right to Vote on Taxes Act,” was approved by the voters on November 5, 1996 adding Articles XIIC and XIID to the California Constitution. Article XIID provides substantive and procedural requirements on the imposition, extension or increase of any “fee” or “charge” levied by a local government upon a parcel of real property or upon a person as an incident of property ownership. As a wholesaler, Metropolitan serves water to its member agencies, not to persons or properties as an incident of property ownership. Thus, water rates charged by Metropolitan to its member agencies are not property related fees and charges and therefore are exempt from the requirements of Article XIID. Fees for water service by Metropolitan’s member agencies or their agencies providing retail water service are subject to the requirements of Article XIID.

Article XIID also imposes certain procedures with respect to assessments. Under Article XIID, “standby charges” are considered “assessments” and must follow the procedures required for “assessments.” Metropolitan has imposed water standby charges since 1992. Any change to Metropolitan’s current standby charges could require notice to property owners and approval by a majority of such owners returning mail-in ballots approving or rejecting any imposition or increase of such standby charge. Twenty-two member agencies have elected to collect all or a portion of their readiness-to-serve charges through standby charges. See “—Additional Revenue Components—*Readiness-to-Serve Charge*” and “—*Water Standby Charges*” above. Even if Article XIID is construed to limit the ability of Metropolitan and its member agencies to impose or collect standby charges, the member agencies will continue to be obligated to pay the readiness-to-serve charges.

Article XIIC extends the people’s initiative power to reduce or repeal previously authorized local taxes, assessments fees and charges. This extension of the initiative power is not limited by the terms of Article XIIC to fees imposed after November 6, 1996 or to property-related fees and charges and absent other authority could result in retroactive reduction in existing taxes, assessments or fees and charges.

Proposition 26, a State ballot initiative aimed at restricting regulatory fees and charges, was approved by the California voters on November 2, 2010. Proposition 26 broadens the definition of “tax” in Article XIIC of the California Constitution to include levies, charges and exactions imposed by local governments, except for charges imposed for benefits or privileges or for services or products granted to the payor (and not provided to those not charged) that do not exceed their reasonable cost; regulatory fees that do not exceed the cost of regulation; fees for the use of local governmental property; fines and penalties imposed for violations of law; real property development fees; and assessments and property-related fees imposed under Article XIID of the California Constitution. Taxes imposed by a special district such as Metropolitan are subject to approval by two-thirds of the voters voting on the ballot measure for authorization. Proposition 26 applies to charges imposed or increased by local governments after the date of its approval. Metropolitan believes its water rates and charges are not taxes under Proposition 26. Nevertheless, Metropolitan is assessing whether Proposition 26 may affect future water rates and charges. SDCWA’s lawsuit challenging the rates adopted by Metropolitan in April 2012, part of which became effective January 1, 2013 and part of which ~~will become~~ became effective January 1, 2014, ~~alleges~~ alleged that such rates violate Proposition 26. (See “—Litigation Challenging Rate Structure” above.)

Propositions 218 and 26 were adopted as measures that qualified for the ballot pursuant to the State’s initiative process. From time to time, other initiative measures could be adopted or legislative measures could be approved by the Legislature, which may place limitations on the ability of Metropolitan or its member agencies to increase revenues or to increase appropriations. Such measures may further affect Metropolitan’s ability to collect taxes, assessments or fees and charges, which could have an effect on Metropolitan’s revenues.

Investment of Moneys in Funds and Accounts

All moneys in any of the funds and accounts established pursuant to Metropolitan's water revenue or general obligation ~~revenue~~ bond resolutions are invested by the Treasurer in accordance with Metropolitan's Statement of Investment Policy. All Metropolitan funds available for investment are currently invested in United States Treasury and agency securities, commercial paper, negotiable certificates of deposit, banker's acceptances, corporate notes, municipal bonds, asset-backed, mortgage-backed securities and the California Local Agency Investment Fund ("LAIF"). The LAIF is a voluntary program created by statute as an investment alternative for California's local governments and special districts. LAIF permits such local agencies to participate in an investment portfolio, which invests billions of dollars, using the investment expertise of the State Treasurer's Office.

The Statement of Investment Policy provides that in managing Metropolitan's investments, the primary objective shall be to safeguard the principal of the invested funds. The secondary objective shall be to meet all liquidity requirements and the third objective shall be to achieve a return on the invested funds. Although the Statement of Investment Policy permits investments in some asset-backed securities, the portfolio does not include any of the special investment vehicles related to sub-prime mortgages. The Statement of Investment Policy allows Metropolitan to exceed the portfolio and single issuer limits for purchases of California local agency securities when purchasing Metropolitan tendered bonds in conjunction with its self-liquidity program. See "METROPOLITAN EXPENDITURES—Variable Rate and Swap Obligations" in this Appendix A. Metropolitan's current investments comply with the Statement of Investment Policy.

As of ~~March 31,~~September 30, 2014, the total market value (cash-basis) of all Metropolitan funds was ~~\$1.381.37~~ billion, including bond reserves of ~~\$118.483.8~~ million. The market value of Metropolitan's investment portfolio is subject to market fluctuation and volatility and general economic conditions. In fiscal year ~~2012-13,2013-14,~~ Metropolitan's earnings on investments, including adjustments for gains and losses and premiums and discounts, including construction account and trust fund earnings, on a cash basis (unaudited) were ~~\$11.715.7~~ million. In fiscal year ~~2011-12,2012-13,~~ Metropolitan's earnings on investments, on a cash basis (unaudited) were ~~\$17.89.4~~ million. In fiscal year ~~2010-11,2011-12,~~ Metropolitan's earnings on investments, on a cash basis (unaudited) were ~~\$20.013.9~~ million. Over the three years ended ~~March 31,September 30,~~ 2014, the market value of the month-end balance of Metropolitan's investment portfolio (excluding bond reserve funds) averaged approximately ~~\$1.01.1~~ billion. The minimum month-end balance of Metropolitan's investment portfolio (excluding bond reserve funds) during such period was approximately ~~\$811.8829.5~~ million on ~~August~~July 31, ~~2011,2012.~~ See Footnote 3 to Metropolitan's audited financial statements in Appendix B for additional information on the investment portfolio.

Metropolitan's regulations require that (1) the Treasurer provide an annual Statement of Investment Policy for approval by Metropolitan's Board, (2) the Treasurer provide a monthly investment report to the Board and the General Manager showing by fund the description, maturity date, yield, par, cost and current market value of each security, and (3) the General Counsel review as to eligibility the securities invested in by the Treasurer for that month and report his or her determinations to the Board. The Board approved the Statement of Investment Policy for fiscal year ~~20132014-1415~~ on June ~~11,2013.10,2014.~~

Subject to the provisions of Metropolitan's water revenue or general obligation bond resolutions, obligations purchased by the investment of bond proceeds in the various funds and accounts established pursuant to a bond resolution are deemed at all times to be a part of such funds and accounts and any income realized from investment of amounts on deposit in any fund or account therein will be credited to such fund or account. The Treasurer is required to sell or present for redemption any investments whenever it may be necessary to do so in order to provide moneys to meet required payments or transfers from such funds and accounts. For the purpose of determining at any given time the balance in any such funds, any such

investments constituting a part of such funds and accounts will be valued at the then estimated or appraised market value of such investments.

All investments, including those authorized by law from time to time for investments by public agencies, contain certain risks. Such risks include, but are not limited to, a lower rate of return than expected and loss or delayed receipt of principal. The occurrence of these events with respect to amounts held under Metropolitan's water revenue or general obligation revenue bond resolutions, or other amounts held by Metropolitan, could have a material adverse effect on Metropolitan's finances. These risks may be mitigated, but are not eliminated, by limitations imposed on the portfolio management process by Metropolitan's Statement of Investment Policy.

The Statement of Investment Policy requires that investments have a minimum credit rating of "A1/P1/F1" for short-term securities and "A" for longer-term securities at the time of purchase. If immediate liquidation of a security downgraded below these levels is not in the best interests of Metropolitan, the Treasurer or investment manager, in consultation with an ad hoc committee made up of the Chairman of the Board, the Chairman of the Finance and Insurance Committee and the General Manager, and with the concurrence of the General Counsel, may dispose of the security in an orderly and prudent manner considering the circumstances, under terms and conditions approved by a majority of the members of such ad hoc committee. The Treasurer is required to include a description of any securities that have been downgraded below investment grade and the status of their disposition in the Treasurer's monthly report.

The Statement of Investment Policy also limits the amount of securities that can be purchased by category, as well as by issuer, and prohibits investments that can result in zero interest income. Metropolitan's securities are settled on a delivery versus payment basis and are held by an independent third-party custodian. See Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT [FOR FISCAL YEAR ENDED JUNE 30, 2014](#) AND BASIC FINANCIAL STATEMENTS FOR FISCAL YEARS ENDED JUNE 30, ~~2013~~2014 AND JUNE 30, ~~2012~~ AND BASIC FINANCIAL STATEMENTS FOR THE SIX MONTHS ENDED DECEMBER 31, 2013 AND 2012 (UNAUDITED)[2013](#)" for a description of Metropolitan's investments at ~~December 31, 2013~~[June 30, 2014](#).

Metropolitan retains two outside investment firms to manage the long-term portion of Metropolitan's portfolio. The outside managers are required to adhere to Metropolitan's Statement of Investment Policy. As of ~~March 31~~[September 30](#), 2014, such managers were managing approximately \$~~328.7~~[331.2](#) million in investments on behalf of Metropolitan. Metropolitan's Statement of Investment Policy may be changed at any time by the Board (subject to State law provisions relating to authorized investments). There can be no assurance that the State law and/or the Statement of Investment Policy will not be amended in the future to allow for investments that are currently not permitted under State law or the Statement of Investment Policy, or that the objectives of Metropolitan with respect to investments or its investment holdings at any point in time will not change.

METROPOLITAN EXPENDITURES

General

The following table sets forth a summary of Metropolitan's expenditures, by major function, for the five years ended June 30, ~~2013~~2014. The table provides cash basis information, which is unaudited. Expenses of Metropolitan for the fiscal years ended June 30, ~~2013~~2014 and June 30, ~~2012~~2013, on an accrual basis, are shown in Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT [FOR FISCAL YEAR ENDED JUNE 30, 2014](#) AND BASIC FINANCIAL STATEMENTS FOR FISCAL YEARS ENDED JUNE 30, ~~2013~~2014 AND JUNE 30, ~~2012~~ AND BASIC FINANCIAL STATEMENTS FOR THE SIX MONTHS ENDED DECEMBER 31, 2013 AND 2012 (UNAUDITED)[2013](#)."

SUMMARY OF EXPENDITURES
Fiscal Years Ended June 30
(Dollars in Millions)

	2009	2010	2011	2012	2013	2014
Operation and Maintenance Costs ⁽¹⁾	\$ 455.6	\$ 441.6	\$ 430.8	\$ 425.3	\$ 413	<u>\$ 561.3</u>
Total State Water Project and Water Transfers ⁽²⁾	478.8	560.1	593.4	535.4	531	<u>472.5</u>
Total Debt Service	281.6	287.0	306.7	323.0	326	<u>372.0</u>
Construction Disbursements from Revenues ⁽³⁾	30.6	35.1	45.0	44.2	54	<u>89.3</u>
Other ⁽⁴⁾	8.3	5.3	2.4	2.8	6	<u>6.3</u>
Total Disbursements (net of reimbursements) ⁽⁵⁾	\$1,254.9	\$1,329.1	\$1,378.3	\$1,330.7	\$1,332	<u>\$1,501.4</u>

Source: Metropolitan.

- (1) Includes inventories, undistributed payroll, local resource programs, conservation programs and Colorado River Aqueduct power. See the table headed "Summary of Receipts by Source" under "METROPOLITAN REVENUES" in this Appendix A.
- (2) Includes both operating and capital expense portions. See "METROPOLITAN'S WATER SUPPLY—Water Transfer, Storage and Exchange Programs" and "POWER SOURCES AND COSTS" in this Appendix A.
- (3) At the discretion of the Board, in any given year, Metropolitan may increase or decrease funding available for construction disbursements to be paid from revenues.—~~Disbursements paid from revenues decreased in fiscal year ended June 30, 2009, primarily due to the Board's policy to maintain adequate reserve levels in the rate stabilization funds to mitigate future increases in water rates and charges. See "METROPOLITAN REVENUES—Financial Reserve Policy" in this Appendix A.~~ Does not include expenditures of bond proceeds.
- (4) Includes operating equipment and arbitrage rebate.
- (5) Disbursements exceeded revenues in the fiscal years ended June 30, 2010 and 2011. See "METROPOLITAN REVENUES—Financial Reserve Policy" in this Appendix A.

Revenue Bond Indebtedness

Metropolitan has issued the following water revenue bonds, which as of ~~May~~November 1, 2014, were outstanding in the amounts set forth below:

<u>Name of Issue</u>	<u>Original Amount Issued</u>	<u>Principal Outstanding</u>
Water Revenue Bonds, Issue of 1991	\$ 300,000,000	\$ -0-
Water Revenue Bonds, Issue of 1992	550,000,000	-0-
Water Revenue Refunding Bonds, 1993 Series A	168,759,889	105,185,000 <u>101,840,000</u>
Water Revenue Refunding Bonds, 1993 Series B	89,595,000	-0-
Water Revenue Bonds, 1995 Series A	175,000,000	-0-
Water Revenue Refunding Bonds, 1996 Series A	108,375,000	-0-
Water Revenue Refunding Bonds, 1996 Series B	258,875,000	-0-
Water Revenue Bonds, 1996 Series C	377,500,000	-0-
Water Revenue Bonds, 1997 Authorization, Series A	650,000,000	-0-
Water Revenue Bonds, 1997 Authorization, Series B and Series C	100,000,000	-0-
Water Revenue Refunding Bonds, 1998 Series A	148,705,000	-0-
Water Revenue Bonds, 1999 Authorization, Series A	100,000,000	-0-
Water Revenue Bonds, 1999 Authorization, Series B and Series C	100,000,000	-0-
Water Revenue Bonds, 2000 Authorization, Series B-1 ⁽⁺⁾	88,800,000	-0-
Water Revenue Bonds, 2000 Authorization, Series B-2 ⁽⁺⁾	88,800,000	-0-
Water Revenue Bonds, 2000 Authorization, Series B-3 and B-4 ⁽¹⁾	177,600,000	177,600,000
Water Revenue Refunding Bonds, 2001 Series A	195,670,000	-0-
Water Revenue Refunding Bonds, 2001 Series B1 and B-2	224,800,000	-0-
Water Revenue Bonds, 2001 Series C-1 and C-2	200,000,000	-0-
Water Revenue Refunding Bonds, 2002 Series A	96,640,000	-0-
Water Revenue Refunding Bonds, 2002 Series B	35,600,000	-0-
Water Revenue Refunding Bonds, 2003 Series A	36,215,000	11,780,000 <u>-0-</u>
Water Revenue Bonds, 2003 Authorization, Series B-1	105,580,000	-0-
Water Revenue Bonds, 2003 Authorization, Series B-2	94,420,000	-0-
Water Revenue Refunding Bonds, 2003 Series C-1, C-2 and C-3	338,230,000	-0-
Water Revenue Refunding Bonds, 2004 Series A-1 and A-2 ⁽⁺⁾	162,455,000	79,185,000 <u>-0-</u>
Water Revenue Refunding Bonds, 2004 Series B*	274,415,000	87,945,000 <u>-0-</u>
Water Revenue Bonds, 2003 Authorization, Series B-3	262,295,000	8,540,000 <u>-0-</u>
Water Revenue Bonds, 2003 Authorization, Series B-4	37,705,000	-0-
Water Revenue Refunding Bonds, 2004 Series C	136,090,000	-0-
Water Revenue Bonds, 2005 Authorization, Series A	100,000,000	75,620,000
Water Revenue Bonds, 2005 Authorization, Series B-1 and B-2	100,000,000	-0-
Water Revenue Refunding Bonds, 2006 Series A-1 and A-2	74,140,000	-0-
Water Revenue Bonds, 2005 Authorization, Series C	200,000,000	175,000,000
Water Revenue Bonds, 2005 Authorization, Series D-1 and D-2	100,000,000	-0-
Water Revenue Refunding Bonds, 2006 Series B	45,875,000	24,055,000
Water Revenue Bonds, 2006 Authorization, Series A	400,000,000	393,160,000 <u>391,355,000</u>
Water Revenue Bonds, 2006 Authorization, Series B	100,000,000	-0-
Water Revenue Refunding Bonds, 2007 Series A-1 and A-2	218,425,000	-0-
Water Revenue Refunding Bonds, 2007 Series B	81,900,000	-0-
Water Revenue Refunding Bonds, 2008 Series A-1	250,940,000	-0-
Water Revenue Refunding Bonds, 2008 Series A-2 ⁽¹⁾	250,635,000	145,985,000 <u>62,465,000</u>
Water Revenue Refunding Bonds, 2008 Series B	133,430,000	127,410,000 <u>127,200,000</u>
Water Revenue Refunding Bonds, 2008 Series C	79,045,000	48,580,000 <u>41,800,000</u>
Water Revenue Bonds, 2008 Authorization, Series A	200,000,000	187,830,000
Water Revenue Refunding Bonds, 2009 Series A-1	104,185,000	-0-
Water Revenue Refunding Bonds, 2009 Series A-2 ⁽¹⁾	104,180,000	104,180,000
Water Revenue Refunding Bonds, 2009 Series B	106,690,000	106,690,000
Water Revenue Refunding Bonds, 2009 Series C	91,165,000	91,165,000
Water Revenue Bonds, 2008 Authorization, Series B	21,615,000	17,275,000 <u>15,035,000</u>

<u>Name of Issue</u>	<u>Original Amount Issued</u>	<u>Principal Outstanding</u>
Water Revenue Bonds, 2008 Authorization, Series C ⁽²⁾	78,385,000	78,385,000
Water Revenue Bonds, 2008 Authorization, Series D ⁽²⁾	250,000,000	250,000,000
Water Revenue Refunding Bonds, 2009 Series D	81,065,000	70,390,000 64,740,000
Water Revenue Refunding Bonds, 2009 Series E	26,050,000	21,020,000 18,355,000
Water Revenue Refunding Bonds, Special Variable Rate, 2010 Series A ^{(+)*}	128,005,000	9,825,000 0-
Water Revenue Refunding Bonds, 2010 Series B	88,845,000	88,845,000 84,175,000
<i>(Continued on next page)</i>		
<i>(Continued from previous page)</i>		
<i>(Continued on next page)</i>		
<i>(Continued from previous page)</i>		
Water Revenue Bonds, 2010 Authorization, Series A ⁽²⁾	\$ 250,000,000	\$ 250,000,000
Water Revenue Refunding Bonds, 2011 Series A1-A4 ⁽¹⁾	228,875,000	228,875,000
Water Revenue Refunding Bonds, 2011 Series B	167,885,000	105,645,000 73,230,000
Water Revenue Refunding Bonds, 2011 Series C	157,100,000	156,600,000 156,100,000
Water Revenue Refunding Bonds, 2012 Series A	181,180,000	00,000
Water Revenue Refunding Bonds, 2012 Series B-1 and B-2 ⁽¹⁾	98,585,000	181,180,000
		98,585,000
Water Revenue Refunding Bonds, 2012 Series C	190,600,000	190,600,000
Water Revenue Refunding Bonds, 2012 Series D	39,520,000	30,330,000 19,605,000
<u>Water Revenue Refunding Bonds, 2012 Series E1</u>	<u>28,420,000</u>	<u>-0-</u>
Water Revenue Refunding Bonds, 2012 Series E1*	28,420,000	28,420,000
Water Revenue Refunding Bonds, 2012 Series E2	29,820,000	29,820,000
Water Revenue Refunding Bonds, 2012 Series E3	31,220,000	31,220,000
Water Revenue Refunding Bonds, 2012 Series F	60,035,000	60,035,000
Water Revenue Refunding Bonds, 2012 Series G	111,890,000	111,890,000
Special Variable Rate Water Revenue Refunding Bonds, 2013 Series D ⁽¹⁾	87,445,000	87,445,000
Special Variable Rate Water Revenue Refunding Bonds, 2013 Series E ⁽¹⁾	104,820,000	104,820,000
Water Revenue Refunding Bonds, 2014 Series A	95,935,000	95,935,000
Water Revenue Refunding Bonds, 2014 Series B	10,575,000	10,575,000
Water Revenue Refunding Bonds, 2014 Series C1-C3	30,335,000	30,335,000
<u>Special Variable Rate Water Revenue Refunding Bonds, 2014 Series D⁽¹⁾</u>	<u>79,770,000</u>	<u>79,770,000</u>
<u>Water Revenue Refunding Bonds, 2014 Series E</u>	<u>86,060,000</u>	<u>86,060,000</u>
<u>Water Revenue Refunding Bonds, 2014 Series F</u>	<u>7,860,000</u>	<u>7,860,000</u>
<u>Water Revenue Refunding Bonds, 2014 Series G1-G5</u>	<u>57,840,000</u>	<u>57,840,000</u>
Total	\$10,946,989,889¹	\$4,317,960,004¹
	1,232,469,889	169,270,000

Source: Metropolitan.

(1) Outstanding variable rate obligation.

(2) Designated as “Build America Bonds” pursuant to the American Recovery and Reinvestment Act of 2009.

* ~~Metropolitan expects to issue its Special Variable Rate Water Revenue Refunding Bonds, 2014 Series D to refund all or a portion of these bonds.~~

Limitations on Additional Revenue Bonds

Resolution 8329, adopted by Metropolitan's Board on July 9, 1991, as amended and supplemented (collectively with all such supplemental resolutions, the “Revenue Bond Resolutions”), provides for the issuance of Metropolitan's water revenue bonds. The Revenue Bond Resolutions establish limitations on the issuance of additional obligations payable from Net Operating Revenues. Under the Revenue Bond Resolutions, no additional bonds, notes or other evidences of indebtedness payable out of Operating

Revenues may be issued having any priority in payment of principal, redemption premium, if any, or interest over any water revenue bonds authorized by the Revenue Bond Resolutions (“Parity Bonds”) or other obligations of Metropolitan having a lien and charge upon, or being payable from, the Net Operating Revenues on parity with such water revenue bonds (“Parity Obligations”). No additional Parity Bonds or Parity Obligations may be issued or incurred unless the conditions of the Revenue Bond Resolutions have been satisfied.

The laws governing Metropolitan's ability to issue water revenue bonds currently provide two additional limitations on indebtedness that may be incurred by Metropolitan. The Act provides for a limit on general obligation bonds, water revenue bonds and other evidences of indebtedness at 15 percent of the assessed value of all taxable property within Metropolitan’s service area. As of ~~May~~November 1, 2014, outstanding general obligation bonds, water revenue bonds and other evidences of indebtedness in the amount of ~~\$4.464.31~~ billion represented approximately ~~0.200.19~~ percent of the fiscal year ~~2013-14~~2014-15 taxable assessed valuation of ~~\$2,183.42,315~~ billion. The second limitation under the Act specifies that no revenue bonds may be issued, except for the purpose of refunding, unless the amount of net assets of Metropolitan as shown on its balance sheet as of the end of the last fiscal year prior to the issuance of such bonds, equals at least 100 percent of the aggregate amount of revenue bonds outstanding following the issuance of such bonds. The net assets of Metropolitan at June 30, ~~2013~~2014 were ~~\$6.807.20~~ billion. The aggregate amount of revenue bonds outstanding as of ~~May~~November 1, 2014 was ~~\$4.324.17~~ billion. The limitation does not apply to other forms of financing available to Metropolitan. Audited financial statements including the net assets of Metropolitan as of June 30, ~~2013~~2014 and June 30, ~~2012, 2013,~~ respectively, are shown in Appendix B – “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR FISCAL YEARS ENDED JUNE 30, 2013 AND JUNE 30, ~~2012- AND BASIC FINANCIAL STATEMENTS FOR THE SIX MONTHS ENDED DECEMBER 31, 2013 AND 2012 (UNAUDITED)-2013.~~”

Metropolitan provides no assurance that the Act’s limitations on indebtedness will not be revised or removed by future legislation. Limitations under the Revenue Bond Resolutions respecting the issuance of additional obligations payable from Net Operating Revenues on a parity with water revenue bonds of Metropolitan will remain in effect so long as any water revenue bonds authorized pursuant to the Revenue Bond Resolutions are outstanding, provided however, that the Revenue Bond Resolutions are subject to amendment and supplement in accordance with their terms.

Variable Rate and Swap Obligations

As of ~~May~~November 1, 2014, Metropolitan had outstanding ~~\$1.04 billion~~943.7 million of variable rate obligations, including bonds bearing interest in the Index Mode or Flexible Index Mode (the “Index Tender Bonds”) ~~and~~, special variable rate bonds initially designated as self-liquidity bonds (the “Self-Liquidity Bonds”), and variable rate demand obligations supported by standby bond purchase agreements between Metropolitan and various liquidity providers (“Liquidity Supported Bonds”). ~~As of May 1, 2014, the~~

Index Tender Bonds. The Index Tender Bonds have substantially similar terms and conditions; however, the unscheduled mandatory tender dates and related tender periods for the Index Tender Bonds may differ. The Index Tender Bonds bear interest at a rate that fluctuates weekly based on the SIFMA Municipal Swap Index published weekly by Municipal Market Data. The Index Tender Bonds outstanding as of November 1, 2014, are summarized in the following table:

Series	Date of Issuance	Original Principal Amount Issued	Next Scheduled Mandatory Tender Date	Maturity Date
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2009 A-2	May 20, 2009	\$104,180,000	February 9, 2015	July 1, 2030
2011 A-1	June 2, 2011	64,440,000	January 16, 2015	July 1, 2036
2011 A-2	June 2, 2011	50,000,000	May 1, 2015	July 1, 2036
2011 A-3	June 2, 2011	64,435,000	January 16, 2015	July 1, 2036
2011 A-4	June 2, 2011	50,000,000	May 1, 2015	July 1, 2036
2012 B-1	April 27, 2012	49,295,000	May 1, 2015	July 1, 2027
2012 B-2	April 27, 2012	49,295,000 <u>49,290,000</u>	May 1, 2015	July 1, 2027
		<u>0</u>		
2013 E ⁽¹⁾	July 2, 2013	104,820,000	October 6, June 5, <u>2014 2015</u>	July 1, 2030
Total		\$536,460,000		

Source: Metropolitan.

- (1) Flexible Index Mode Bonds. [The terms and conditions of Flexible Index Mode Bonds are substantially similar to Index Mode Bonds except that each tender period may not exceed 270 days.](#)

~~The Index Tender Bonds have substantially similar terms and conditions; however, the unscheduled mandatory tender dates and related tender periods for the Index Tender Bonds may differ. The Index Tender Bonds bear interest at a rate that fluctuates weekly based on the SIFMA Municipal Swap Index published weekly by Municipal Market Data.~~ The Index Tender Bonds are subject to mandatory tender under certain circumstances. Metropolitan anticipates that it will pay the purchase price of tendered Index Tender Bonds from the proceeds of remarketing such Index Tender Bonds or from other available funds. Metropolitan's obligation to pay the purchase price of such Index Tender Bonds is an unsecured obligation of Metropolitan that it would pay from Net Operating Revenues only after it has made payments and deposits with respect to its Operating Revenues, the Parity Bonds, Parity Obligations and other obligations secured by Net Operating Revenues. Metropolitan has not secured any liquidity facility or letter of credit to support the payment of the purchase price of Index Tender Bonds in connection with a scheduled mandatory tender. If the purchase price of the Index Tender Bonds of any Series is not paid from the proceeds of remarketing or other funds following a scheduled mandatory tender, such Index Tender Bonds then will bear interest at a default rate of up to 12 percent per annum until purchased by Metropolitan or redeemed. [Failure to pay the purchase price of a series of Index Tender Bonds on a scheduled mandatory tender date is a default under the related paying agent agreement, upon the occurrence and continuance of which a majority in aggregate principal amount of the owners of such series of Index Tender Bonds may elect a bondholders' committee to exercise rights and powers of such owners under such paying agent agreement. Failure to pay the purchase price of a series of Index Tender Bonds on a scheduled mandatory tender date is not a default under the Master Resolution.](#) If the purchase price of the Index Tender Bonds of any series is not paid on a scheduled mandatory tender date, such Index Tender Bonds will also be subject to special mandatory redemption, in part, 18, 36 and 54 months following the purchase default. Any such special mandatory redemption payment will constitute a Bond Obligation payable on parity with the Parity Bonds and the Parity Obligations. ~~The 2013E Bonds are Flexible Index Mode Bonds, the terms and conditions of which are substantially similar to Index Mode Bonds except that each tender period may not exceed 270 days.~~

[Self-Liquidity Bonds.](#) As of ~~May~~ November 1, 2014, Metropolitan had ~~\$97.3167.2~~ million of outstanding self-liquidity bonds, comprised of ~~\$9.8 million Special Variable Rate Water Revenue Refunding Bonds, 2010 Series A and \$87.4 million Special Variable Rate Water Revenue Refunding Bonds, 2013 Series D.~~ ~~The outstanding 2010 Series A bonds are expected to be refunded from the proceeds of the Special Variable Rate Water Revenue Refunding Bonds,~~ and ~~\$79.8 million Special Variable Rate Water Revenue Refunding Bonds,~~ 2014 Series D. The Self-Liquidity Bonds are subject to optional tender upon seven days' notice by the owners thereof and mandatory tender upon specified events. Metropolitan is irrevocably committed to purchase all Self-Liquidity Bonds tendered pursuant to any optional or mandatory tender to the

extent that remarketing proceeds are insufficient therefor and no standby bond purchase agreement or other liquidity facility is in effect. Metropolitan's obligation to pay the purchase price of any tendered Self-Liquidity Bonds is an unsecured, special limited obligation of Metropolitan payable from Net Operating Revenues. In addition, Metropolitan's investment policy permits it to purchase tendered Self-Liquidity Bonds as an investment for its investment portfolio (other than amounts in its investment portfolio consisting of bond reserve funds). Thus, while Metropolitan is only obligated to purchase tendered Self-Liquidity Bonds from Net Operating Revenues, it may use the cash and investments in its investment portfolio (other than amounts in its investment portfolio consisting of bond reserve funds and amounts posted as collateral with interest rate swap counterparties as described below) to purchase tendered Self-Liquidity Bonds. Metropolitan has not secured any liquidity facility or letter of credit to pay the purchase price of any tendered Self-Liquidity Bonds; however, Metropolitan has entered into a Revolving Credit Agreement (as described below) pursuant to which it may make borrowings for the purpose of paying the purchase price of Self-Liquidity Bonds. See "~~—Revolving Credit Agreement~~" below. [Failure to pay the purchase price of Self-Liquidity Bonds upon optional or mandatory tender is not a default under the related paying agent agreement or a default under the Master Resolution.](#)

[Liquidity Supported Bonds.](#) The interest rates for Metropolitan's other variable rate demand obligations, totaling \$~~402.8240.1~~ million as of ~~May~~[November](#) 1, 2014, are reset on a daily or weekly basis. Such variable rate demand obligations are supported by Standby Bond Purchase Agreements between Metropolitan and various liquidity providers that provide for purchase of variable rate bonds by the applicable liquidity provider upon tender of such variable rate bonds and a failed remarketing. A decline in the creditworthiness of a liquidity provider will likely result in an increase in the interest rate of the applicable variable rate bonds, as well as an increase in the risk of a failed remarketing of such tendered variable rate bonds. Variable rate bonds purchased by a liquidity provider bear interest at a significantly higher interest rate and Metropolitan's obligation to reimburse the liquidity provider may convert the term of the variable rate bonds purchased by the liquidity provider into a term loan amortizable over a period of up to three years, depending on the applicable liquidity facility.

The following table ~~sets forth a listing of~~[lists](#) the liquidity providers, the expiration date of each facility and the principal amount of outstanding ~~bonds~~[variable rate demand obligations](#) covered under each facility as of ~~May~~[November](#) 1, 2014.

~~[Remainder of page intentionally left blank.]~~

<u>Liquidity Provider</u>	<u>Bond Issue</u>	<u>Principal Outstanding</u>	<u>Facility Expiration</u>
Wells Fargo Bank, N.A.	2000 Authorization Series B-3	\$ 88,800,000	February 2017
	2000 Authorization Series B-4	<u>88,800,000</u>	February 2017
	Total	\$177,600,000	
U.S. Bank, N.A.	2004 Series A-1	\$ 39,590,000	February 2016
	2004 Series A-2	<u>39,595,000</u>	February 2016
	Total	\$79,185,000	
Barclays Bank PLC	2008 Series A-2	\$145,985,000 <u>62,4</u>	September 2016
Total		\$402,770,000 <u>240,</u>	

Source: Metropolitan.

Variable Rate Exposure Policy. Included in Metropolitan's ~~\$1.04 billion~~943.7 million of variable rate obligations are ~~\$658.3493.6~~ million of variable rate demand obligations which, by virtue of interest rate swap agreements, are treated by Metropolitan as fixed rate debt for the purpose of calculating debt service requirements, although the variable payments that Metropolitan receives from swap counterparties do not usually equal the payments that Metropolitan makes on associated variable rate debt. The remaining ~~\$378450~~ million of variable rate obligations represent approximately ~~8.7~~10.8 percent of total outstanding water revenue bonds, as of ~~May~~November 1, 2014.

Metropolitan's variable rate exposure policy requires that variable rate debt be managed to limit net interest cost increases within a fiscal year as a result of interest rate changes to no more than \$5 million. In addition, the maximum amount of variable interest rate exposure (excluding variable rate bonds associated with interest rate swap agreements) is limited to 40 percent of total outstanding water revenue bond debt. Variable rate debt capacity will be reevaluated as interest rates change and managed within these parameters.

Interest Rate Swap Transactions. By resolution adopted on September 11, 2001, Metropolitan's Board authorized the execution of interest rate swap transactions and related agreements in accordance with a master swap policy, which was subsequently amended by resolutions adopted on July 14, 2009 and May 11, 2010. Metropolitan may execute interest rate swaps if the transaction can be expected to reduce exposure to changes in interest rates on a particular financial transaction or in the management of interest rate risk derived from Metropolitan's overall asset/liability balance, result in a lower net cost of borrowing or achieve a higher net rate of return on investments made in connection with or incidental to the issuance, incurring or carrying of Metropolitan's obligations or investments, or manage variable interest rate exposure consistent with prudent debt practices and Board-approved guidelines. The Chief Financial Officer reports to the Finance and Insurance Committee of Metropolitan's Board each quarter on outstanding swap transactions, including notional amounts outstanding, counterparty exposures and termination values based on then-existing market conditions.

Metropolitan currently has ~~two types~~ one type of interest rate ~~swaps~~. ~~Under the first type, Metropolitan receives payments that are calculated by reference to a floating interest rate and makes payments that are calculated by reference to a fixed interest rate. These swaps are~~ swap, referred to in the table below as “Fixed Payor Swaps.” Under ~~the second~~ this type ~~of swap, referred to in the table below as “Basis Swaps,”~~ Metropolitan receives payments ~~that are~~ calculated by reference to a ~~percentage of the taxable index, LIBOR. In return, Metropolitan~~ floating interest rate and makes payments that are calculated ~~based on either SIFMA or the taxable short term index, one month LIBOR.~~ by reference to a fixed interest rate.

Net payments under the terms of the interest rate swap agreements are payable on a parity with the Parity Obligations. Termination payments under the 2002 A and 2002 B interest rate swap agreements would be payable on a parity with the Parity Obligations. All other termination payments related to interest rate swap agreements would be subordinate to the Parity Obligations.

The following swap transactions were outstanding as of ~~May~~ November 1, 2014:

FIXED PAYOR SWAPS:

<u>Designation</u>	<u>Notional Amount Outstanding</u>	<u>Swap Counterparty</u>	<u>Fixed Payor Rate</u>	<u>MWD Receives</u>	<u>Maturity Date</u>
2002 A	\$88,301,850 <u>5,838,400</u>	Morgan Stanley Capital Services, Inc.	3.300	57.74% of one-month LIBOR	7/1/2025
2002 B	33,033,150 <u>28,371,600</u>	JPMorgan Chase Bank	3.300	57.74% of one-month LIBOR	7/1/2025
2003 ⁽¹⁾	163,295,000 <u>158,597,500</u>	Deutsche Bank AG	3.257	61.20% of one-month LIBOR	7/1/2030
2003	163,295,000 <u>158,597,500</u>	JPMorgan Chase Bank	3.257	61.20% of one-month LIBOR	7/1/2030
2004 A	79,185,000	Morgan Stanley Capital Services, Inc.	2.917	61.20% of one-month LIBOR	7/1/2023
2004 C	7,760,500	Morgan Stanley Capital Services, Inc.	2.980	61.55% of one-month LIBOR	10/1/2029
2004 C	6,349,500	Citigroup Financial Products, Inc.	2.980	61.55% of one-month LIBOR	10/1/2029
2005	58,547,500 <u>29,057,500</u>	JPMorgan Chase Bank	3.360	70% of 3-month LIBOR	7/1/2030
2005	58,547,500 <u>29,057,500</u>	Citigroup Financial Products, Inc.	3.360	70% of 3-month LIBOR	7/1/2030
Total	\$658,315,000 <u>493,630,000</u>				

Source: Metropolitan.

(1) The obligations under ~~these~~ this interest rate swap ~~agreements~~ agreement were assigned by UBS AG to Deutsche Bank AG, New York Branch, pursuant to novation transactions dated July 22, 2010.

BASIS SWAPS:

Swap	Notional Amount Outstanding	Swap Counterparty	Met Receives	Met Pays	Maturity Date
2004	\$125,000,000	JPMorgan Chase Bank	70% of one-month LIBOR + 31.5 basis points	SIFMA	7/1/2014
2004	125,000,000	JPMorgan Chase Bank	70% of one-month LIBOR + 31.5 basis points	SIFMA	7/1/2014
Total	\$250,000,000				

Source: Metropolitan.

These interest rate swap agreements entail risk to Metropolitan. The counterparty may fail or be unable to perform, interest rates may vary from assumptions, Metropolitan may be required to post collateral in favor of its counterparties and Metropolitan may be required to make significant payments in the event of an early termination of an interest rate swap. Metropolitan believes that if such an event were to occur, it would not have a material adverse impact on its financial position. Metropolitan seeks to manage counterparty risk by diversifying its swap counterparties, limiting exposure to any one counterparty, requiring collateralization or other credit enhancement to secure swap payment obligations, and by requiring minimum credit rating levels. Initially swap counterparties must be rated at least “Aa3” or “AA-”, or equivalent by any two of the nationally recognized credit rating agencies; or use a “AAA” subsidiary as rated by at least one nationally recognized credit rating agency. Should the credit rating of an existing swap counterparty drop below the required levels, Metropolitan may enter into additional swaps if those swaps are “offsetting” and risk-reducing swaps. Each counterparty is initially required to have minimum capitalization of at least \$150 million. See Note 5(f) in Appendix B - “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT [FOR FISCAL YEAR ENDED JUNE 30, 2014](#) AND BASIC FINANCIAL STATEMENTS FOR FISCAL YEARS ENDED JUNE 30, ~~2013~~2014 AND JUNE 30, ~~2012~~ AND BASIC FINANCIAL STATEMENTS FOR THE SIX MONTHS ENDED DECEMBER 31, 2013 AND 2012 (UNAUDITED), 2013.”

Early termination of an interest rate swap agreement could occur due to a default by either party or the occurrence of a termination event. As of ~~March 31~~, [September 30](#), 2014, Metropolitan would have been required to pay to its counterparties termination payments if some of its swaps were terminated on that date and would have been entitled to receive termination payments from its counterparties if other swaps were terminated. Metropolitan’s net exposure to its counterparties for all such termination payments on that date was approximately \$89.79 million. Metropolitan does not presently anticipate early termination of any of its interest rate swap agreements due to default by either party or the occurrence of a termination event. However, effective June 28, 2012, Metropolitan exercised optional early termination provisions to terminate all or a portion of certain interest rate swap agreements totaling a notional amount of \$322 million. ~~In addition, effective~~ [Effective](#) February 12, 2014, Metropolitan exercised optional early termination provisions to terminate a portion of certain interest rate swap agreements, totaling a notional amount of \$147 million, ~~in conjunction with the issuance of the Water Revenue Refunding Bonds, 2014 Series A, 2014 Series B and 2014 Series C.~~ [Effective July 29, 2014, Metropolitan optionally terminated portions of certain interest rate swap agreements totaling a notional amount of \\$163 million.](#)

Metropolitan is required to post collateral in favor of a counterparty to the extent that Metropolitan’s total exposure for termination payments to that counterparty exceeds the threshold specified in the applicable swap agreement. Conversely, the counterparties are required to release collateral to Metropolitan or post collateral for the benefit of Metropolitan as market conditions become favorable to Metropolitan. As of ~~March 31~~, [September 30](#), 2014, Metropolitan had no collateral posted with any counterparty. The highest, month-end, amount of collateral posted was \$36.8 million, on June 30, 2012, which was based on an outstanding swap notional amount of \$1.4 billion. The amount of required collateral varies from time to time due primarily to interest rate movements and can change significantly over a short period of time. See

“METROPOLITAN REVENUES—Financial Reserve Policy” in this Appendix A. In the future, Metropolitan may be required to post additional collateral, or may be entitled to a reduction or return of the required collateral amount. Collateral deposited by Metropolitan is held by the counterparties; a bankruptcy of any counterparty holding collateral posted by Metropolitan could adversely affect the return of the collateral to Metropolitan. Moreover, posting collateral limits Metropolitan’s liquidity. If collateral requirements increase significantly, Metropolitan’s liquidity may be materially adversely affected. See “METROPOLITAN REVENUES—Financial Reserve Policy.”

Build America Bonds

Metropolitan previously issued and designated three series of Bonds in the aggregate principal amount of \$578,385,000 as “Build America Bonds” under the provisions of the American Recovery and Reinvestment Act of 2009 (the “Build America Bonds”). Except as they may be reduced by sequestration as described in the following paragraph, Metropolitan currently expects to receive cash subsidies from the United States Treasury equal to 35 percent of the interest payable on all such outstanding Build America Bonds (the “Interest Subsidy Payments”). The Interest Subsidy Payments in connection with the Build America Bonds do not constitute Operating Revenues under the Master Resolution. Such Interest Subsidy Payments will constitute Additional Revenues, which Metropolitan may take into consideration when establishing its rates and charges and will be available to Metropolitan to pay principal of and interest on Metropolitan’s Bonds.

The Budget Control Act of 2011 (the “Budget Control Act”) provided for increases in the federal debt limit and established procedures designed to reduce the federal budget deficit. The Budget Control Act provided that a failure to reduce the deficit would result in sequestration: automatic, generally across-the-board, spending reductions. These reductions began on March 1, 2013 pursuant to an executive order that reduced budgetary authority for expenditures subject to sequestration, including subsidies for Build America Bonds. Pursuant to this executive order, the approximately \$6.64 million interest subsidy payment that Metropolitan received on July 1, 2013 was reduced by 8.7 percent, or \$578,000, to \$6.06 million. Refund payments processed on or after October 1, ~~2013~~2014 and on or before September 30, ~~2014~~2015 are anticipated to be reduced by the fiscal year 2014-2015 sequestration rate of ~~7.2~~7.3 percent, or approximately ~~\$950,000~~964,000 of the \$13.2 million originally projected to be received over this period. The sequestration reduction rate will be applied unless and until a law is enacted that cancels or otherwise impacts the sequester, at which time the sequestration reduction rate is subject to change. Metropolitan can offer no assurances as to future subsidy payments and expects that once it receives less than any full 35 percent subsidy payment, the United States Treasury will not thereafter reimburse Metropolitan for payments not made.

Other Revenue Obligations

As of ~~May~~November 1, 2014, Metropolitan had outstanding ~~\$89.5~~61.0 million of 2012 Series E Parity Bonds in ~~threetwo~~ series ~~and~~, \$30.3 million of 2014 Series C Parity Bonds in three series, ~~and \$57.8 million of 2014 Series G in five series~~, bearing interest in a term mode (the “Term Mode Bonds”). The Term Mode Bonds initially bear interest at a fixed rate for a specified period from their date of issuance, after which there shall be determined a new interest mode for each series (which may be another term mode, a daily mode, a weekly mode, a short-term mode or an index mode) or the Term Mode Bonds may be converted to bear fixed interest rates through the maturity date thereof. The owners of the Term Mode Bonds of a series must tender for purchase, and Metropolitan must purchase, all of the Term Mode Bonds of such series on the specified scheduled mandatory tender date of each term period for such series. The scheduled mandatory tender dates for the ~~threetwo~~ series of the 2012 Series E Bonds are October 1, ~~2014, October 1,~~ 2015 and October 1, ~~2016, respectively.~~2016. For the three series of the 2014 Series C Bonds, the scheduled mandatory tender dates are October 1, 2019, October 1, 2020 and October 1, 2021. For the five series of the 2014 Series G Bonds, the scheduled mandatory tender dates are October 1, 2016, 2017, 2018, 2019, and

2020, respectively. Metropolitan may call the Term Mode Bonds on or after the Call Protection Date for each of the series of Term Mode Bonds. ~~Accordingly, Metropolitan plans to call and refund the 2012 Series E-1 Term Mode Bonds on the Call Protection Date of July 1, 2014, from the proceeds of the Special Variable Rate Water Revenue Refunding Bonds, 2014 Series D.~~

Metropolitan will pay the principal of, and interest on, the Term Mode Bonds on parity with its other Parity Bonds. Metropolitan anticipates that it will pay the purchase price of tendered Term Mode Bonds from the proceeds of remarketing such Term Mode Bonds or from other available funds. Metropolitan's obligation to pay the purchase price of such Term Mode Bonds is an unsecured obligation of Metropolitan that it would pay from Net Operating Revenues only after it has made payments and deposits with respect to its Operating Revenues, the Bonds and Parity Obligations and other obligations secured by Net Operating Revenues. Metropolitan has not secured any liquidity facility or letter of credit to support the payment of the purchase price of Term Mode Bonds in connection with any scheduled mandatory tender. If the purchase price of the Term Mode Bonds of any series is not paid from the proceeds of remarketing or other funds following a scheduled mandatory tender, such Term Mode Bonds will then bear interest at a default rate of up to 12 percent per annum until purchased by Metropolitan or redeemed. If the purchase price of the Term Mode Bonds of any series is not paid on a scheduled mandatory tender date, such Term Mode Bonds will also be subject to special mandatory redemption, in part, 18, 36 and 54 months following the purchase default. Any such special mandatory redemption payment will constitute a Bond Obligation payable on-a parity with the Parity Bonds and the Parity Obligations.

Revolving Credit Agreement

On March 21, 2013, Metropolitan entered into a revolving credit agreement ("Revolving Credit Agreement") with The Bank of New York Mellon ("BNY Mellon"). Under the terms and conditions of the Revolving Credit Agreement, Metropolitan may borrow up to \$96,545,900 for purposes of paying the purchase price of any Self-Liquidity Bonds. Under the Revolving Credit Agreement, a failure by Metropolitan to perform or observe certain covenants could result in a termination of BNY Mellon's commitment and entitle BNY Mellon to declare all amounts then outstanding to be immediately due and payable. Metropolitan has secured its obligation to pay principal and interest under the Revolving Credit Agreement as a Parity Obligation under the Master Resolution. The scheduled expiration date of the Revolving Credit Agreement is March 31, 2016. Metropolitan has no obligation to make borrowings under the Revolving Credit Agreement, maintain the Revolving Credit Agreement or renew the Revolving Credit Agreement. See "—Limitations on Additional Revenue Bonds" above.

When Metropolitan entered into the Revolving Credit Agreement, it designated the principal and interest payable under the Revolving Credit Agreement as Excluded Principal Payments under the Master Resolution and thus, for purposes of calculating Maximum Annual Debt Service, included the amount of principal and interest due and payable under the Revolving Credit Agreement on a schedule of Assumed Debt Service. This schedule of Assumed Debt Service assumes that Metropolitan will pay the principal under the Revolving Credit Agreement over a period of 30 years at a fixed interest rate of 3.75 percent. Pursuant to the terms of the Master Resolution, while the Revolving Credit Agreement is in force and effect, when Metropolitan calculates its covenant relating to the creation or incurrence of additional indebtedness, it will add an amount to its Net Operating Revenues relating to an assumed annual debt service payment that Metropolitan would receive if it were to use the proceeds of the Revolving Credit Agreement to purchase Self-Liquidity Bonds.

Subordinate Revenue Obligations

Metropolitan currently is authorized to issue subordinate debt of up to \$400,000,000 of Commercial Paper Notes payable from Net Operating Revenues on a basis subordinate to the Parity Bonds and the Parity Obligations. Although no Commercial Paper Notes are currently outstanding, the authorization remains in

full force and effect and Metropolitan may issue Commercial Paper Notes from time to time. In addition, Metropolitan obtained a \$20 million California Safe Drinking Water Revolving Fund Loan in 2003 at an interest rate of 2.39 percent per annum to reimburse construction costs for oxidation retrofit facilities at the Henry J. Mills Treatment Plant in Riverside County. The loan payment obligation is subordinate to the Parity Bonds and Parity Obligations. As of ~~May~~November 1, 2014, the principal balance outstanding was ~~\$11,711.2~~ million.

General Obligation Bonds

As ~~May~~of November 1, 2014, \$132,275,000 aggregate principal amount of general obligation bonds payable from *ad valorem* property taxes were outstanding. ~~Ad valorem taxes levied by Metropolitan must be applied solely to the payment of general obligation bonds and other voter approved indebtedness~~ See “METROPOLITAN REVENUES — General” and “— Revenue Allocation Policy and Tax Revenues” in this Appendix A. Metropolitan's revenue bonds are not payable from the levy of *ad valorem* property taxes.

<u>General Obligation Bonds</u>	<u>Amount Issued⁽¹⁾</u>	<u>Principal Outstanding</u>
Waterworks General Obligation Refunding Bonds, 2004 Series A	\$ 68,345,000	\$ 7,090,000
Waterworks General Obligation Refunding Bonds, 2005 Series A*	64,705,000	60,105,000
Waterworks General Obligation Refunding Bonds, 2009 Series A	45,515,000	33,650,000
Waterworks General Obligation Refunding Bonds, 2010 Series A	<u>39,485,000</u>	<u>31,430,000</u>
Total	<u>\$218,050,000</u>	<u>\$132,275,000</u>

Source: Metropolitan.

(1) Voters authorized Metropolitan to issue \$850,000,000 of Waterworks General Obligation Bonds, Election 1966, in multiple series, in a special election held on June 7, 1966. This authorization has been fully utilized. This table lists bonds that refunded such Waterworks General Obligation Bonds, Election 1966.

* Metropolitan expects to issue its Waterworks General Obligation Refunding Bonds, 2014 Series A to refund all or a portion of these bonds.

State Water Contract Obligations

General. On November 4, 1960, Metropolitan entered into its State Water Contract with DWR, under which Metropolitan receives an entitlement to water service from the State Water Project. Subsequently, other public agencies also entered into water supply contracts with DWR, all of which were patterned after Metropolitan’s State Water Contract. Metropolitan’s State Water Contract accounts for nearly one-half of the total entitlement for State Water Project water contracted for by all contractors.

The State Water Contract will remain in effect until 2035 or until all DWR bonds issued to finance construction of project facilities are repaid, whichever is longer. At the expiration of the State Water Contract, Metropolitan has the option to continue service under substantially the same terms and conditions. ~~Metropolitan presently intends to exercise this option to continue service to at least 2052. Representatives of DWR and state water contractors have agreed on key terms to extend the State Water Contract through 2085, and are preparing an agreement in principle for review and approval. DWR expects to begin the CEQA review process in July 2014. Following CEQA review, a State Water Project amendment will be prepared. Such amendment will be subject to review by the Legislature. As of April~~ In June 2014, DWR and State Water Project Contractors reached an AIP to extend the contract to 2085 and to make certain changes related to the financial management of the State Water Project in the future. See “METROPOLITAN’S WATER SUPPLY—State Water Project” in this Appendix A. As of November 1, 2014, the latest maturity of outstanding DWR bonds issued for such purpose was December 1, 2035.

Under the State Water Contract, Metropolitan is obligated to pay allocable portions of the cost of construction of the system and ongoing operating and maintenance costs through at least 2035, regardless of quantities of water available from the project. Other payments are based on deliveries requested and actual deliveries received, costs of power required for actual deliveries of water, and offsets for credits received. Metropolitan's payment obligation for the State Water Project for the fiscal year ended June 30, ~~2013~~2014 was \$~~480.2~~464.6 million, which amount reflects prior year's credits of \$~~77.2~~79.5 million. For the fiscal year ended June 30, ~~2013~~2014, Metropolitan's payment obligations under the State Water Contract were approximately ~~373~~1 percent of Metropolitan's total annual expenditures. A portion of Metropolitan's annual property tax levy is for payment of State Water Contract ~~capital charges~~obligations, as described above under "METROPOLITAN REVENUES—General" in this Appendix A. See Note 9(a) to Metropolitan's audited financial statements in Appendix B for an estimate of Metropolitan's payment obligations under the State Water Contract. Also see "POWER SOURCES AND COSTS" in this Appendix A for a description of current and future costs for electric power required to operate State Water Project pumping systems and a description of litigation involving the federal relicensing of the Hyatt-Thermalito hydroelectric generating facilities at Lake Oroville.

The State Water Contract requires that in the event that Metropolitan fails or is unable to raise sufficient funds by other means, Metropolitan must levy upon all property within its boundaries not exempt from taxation a tax or assessment sufficient to provide for all payments under the State Water Contract. Currently, a portion of the capital costs under the State Water Contract are paid from *ad valorem* taxes levied by Metropolitan. In the opinion of Metropolitan's General Counsel, a tax increase to provide for additional payments under the State Water Contract would be within the exemption permitted under Article XIII A of the State Constitution as a tax to pay pre-1978 voter approved indebtedness.

Metropolitan capitalizes its share of system construction costs as participation rights in State Water Project facilities as such costs are billed by DWR. Unamortized participation rights essentially represent a prepayment for future water deliveries through the State Water Project system. Metropolitan's share of system operating and maintenance costs are annually expensed.

Metropolitan has entered into amendments to the State Water Contract that represent additional long-term obligations, as described below.

Devil Canyon-Castaic Contract. On June 23, 1972, Metropolitan and five other southern California public agencies entered into a contract (the "Devil Canyon-Castaic Contract") with DWR for the financing and construction of the Devil Canyon and Castaic power recovery facilities, located on the aqueduct system of the State Water Project. Under this contract, DWR agreed to build the Devil Canyon and Castaic facilities, using the proceeds of revenue bonds issued by DWR under the State Central Valley Project Act. DWR also agreed to use and apply the power made available by the construction and operation of such facilities to deliver water to Metropolitan and the other contracting agencies. Metropolitan, in turn, agreed to pay to DWR ~~88.1~~88 percent of the debt service on the revenue bonds issued by DWR. For calendar year 2013, this represented a payment of \$6.7 million. In addition, Metropolitan agreed to pay 78.5 percent of the operation and maintenance expenses of the Devil Canyon facilities and 96 percent of the operation and maintenance expenses of the Castaic facilities. Metropolitan's obligations under the Devil Canyon-Castaic Contract continue until the bonds are fully retired in 2022 even if DWR is unable to operate the facilities or deliver power from these facilities.

Off-Aqueduct Power Facilities. In addition to system "on-aqueduct" power facilities costs, DWR has, either on its own or by joint venture, financed certain off-aqueduct power facilities. The power generated is utilized by the system for water transportation and other State Water Project purposes. Power generated in excess of system needs is marketed to various utilities and the California power exchange market. Metropolitan is entitled to a proportionate share of the revenues resulting from sales of excess power. By virtue of a 1982 amendment to the State Water Contract and the other water supply contracts, Metropolitan and the other water contractors are responsible for paying the capital and operating costs of the

off-aqueduct power facilities regardless of the amount of power generated. Other costs of Metropolitan in relation to the State Water Project and the State Water Contract may increase as a result of restructuring of California's electric utility industry and new Federal Energy Regulatory Commission ("FERC") regulations.

East Branch Enlargement Amendment. In 1986, Metropolitan's State Water Contract and the water supply contracts of certain other State Water Project ~~contractors~~ Contractors were amended for the purpose, among others, of financing the enlargement of the East Branch of the California Aqueduct. Under the amendment, enlargement of the East Branch can be initiated either at Metropolitan's request or by DWR finding that enlargement is needed to meet demands. Metropolitan, the other State Water Contractors on the East Branch, and DWR are currently in discussions on the timetable and plan for future East Branch enlargement actions.

The amendment establishes a separate subcategory of the Transportation Charge under the State Water Contract for the East Branch Enlargement and provides for the payment of costs associated with financing and operating the East Branch Enlargement. Under the amendment, the annual financing costs for such facilities financed by bonds issued by DWR are allocated among the participating contractors based upon the delivery capacity increase allocable to each participating contractor. Such costs include, but are not limited to, debt service, including coverage requirements, deposits to reserves, and certain operation and maintenance expenses, less any credits, interest earnings or other moneys received by DWR in connection with this facility.

If any participating contractor defaults on payment of its allocable charges under the amendment, among other things, the non-defaulting participating contractors may assume responsibility for such charges and receive delivery capability that would otherwise be available to the defaulting participating contractor in proportion to the non-defaulting contractor's participation in the East Branch Enlargement. If participating contractors fail to cure the default, Metropolitan will, in exchange for the delivery capability that would otherwise be available to the defaulting participating contractor, assume responsibility for the capital charges of the defaulting participating contractor.

Water System Revenue Bond Amendment. In 1987, the State Water Contract and other water supply contracts were amended for the purpose of financing State Water Project facilities through revenue bonds. This amendment establishes a separate subcategory of the Delta Water Charge and the Transportation Charge for projects financed with DWR water system revenue bonds. This subcategory of charge provides the revenues required to pay the annual financing costs of the bonds and consists of two elements. The first element is an annual charge for repayment of capital costs of certain revenue bond financed water system facilities under the existing water supply contract procedures. The second element is a water system revenue bond surcharge to pay the difference between the total annual charges under the first element and the annual financing costs, including coverage and reserves, of DWR's water system revenue bonds.

If any contractor defaults on payment of its allocable charges under this amendment, DWR is required to allocate a portion of the default to each of the nondefaulting contractors, subject to certain limitations, including a provision that no nondefaulting contractor may be charged more than 125 percent of the amount of its annual payment in the absence of any such default. Under certain circumstances, the nondefaulting contractors would be entitled to receive an allocation of the water supply of the defaulting contractor.

The following table sets forth Metropolitan's projected costs of State Water Project water, based upon DWR's Annual Billing to Metropolitan for calendar year ~~2014~~2015 and projections based on Metropolitan's adopted biennial budget for fiscal years 2014-15 and 2015-16. ~~Projections for fiscal year 2013-14 include actual results for July 2013 through March 2014 with revised projections for the balance of the fiscal year. The projections include projected costs to complete the planning phase of the BDCP.~~ If a Bay-Delta improvement alternative is identified and funding is approved, construction may commence in

2016. See “METROPOLITAN’S WATER SUPPLY—State Water Project—Bay-Delta Regulatory and Planning Activities” in this Appendix A.

**PROJECTED COSTS OF METROPOLITAN
FOR STATE WATER PROJECT WATER⁽¹⁾**
(Dollars in Millions)

Year Ending June 30	Capital Costs	Minimum OMP&R ⁽²⁾	Power Costs ⁽³⁾	Refunds & Credits	Total ⁽⁴⁾
2014	\$153.9	\$189.2	\$136.2	\$(66.4)	\$412.9
2015	\$161.9	\$182.2	\$189.5	\$(38.0)	495.7
2016	170.0	184.6	196.8	(36.3)	515.0
2017	183.6	190.1	212.6	(36.6)	549.6
2018	193.3	191.0	221.9	(36.4)	669.8
2019	206.6	192.6	235.2	(35.9)	598.4

Source: Metropolitan.

- (1) Projections are based upon DWR’s Annual Billing to Metropolitan for 2014-2015 and attachments (dated July 1, 2013-2014) and Metropolitan’s adopted biennial budget for fiscal years 2014-15 and 2015-16. ~~Projections for fiscal year 2013-14 include actual results for July 2013 through March 2014 with revised projections for the balance of the fiscal year.~~ All costs are adjusted from calendar year to fiscal year periods ending June 30. The total charges shown above differ from those shown in Note 9 of Metropolitan’s audited financial statements ~~(Footnote continued on next page)~~ (for the fiscal years ended June 30, 2013-2014 and June 30, 2012-2013) in Appendix B due to the inclusion above of allowances for inflation and anticipated construction of additional State Water Project facilities. The projections above also include State Water Project refunds and credits. See “POWER SOURCES AND COSTS—State Water Project” in this Appendix A.
- (2) Minimum Operations, Maintenance, Power and Replacement (“OMP&R”) represents costs which are fixed and do not vary with the amount of water delivered.
- (3) Assumptions for water deliveries through the California Aqueduct (not including SBVMWD and Desert Water/CVWD transfers and exchanges) into Metropolitan’s service area and to storage programs are as follows: ~~0.97 million acre-feet for fiscal year 2013-14,~~ 0.91 million acre-feet for fiscal year 2014-15, 0.91 million acre-feet for fiscal year 2015-16, 0.91 million acre-feet for fiscal year 2016-17 and 0.91, 0.93 million acre-feet for fiscal year 2017-18, and 0.93 million acre-feet for fiscal year 2018-19. Availability of State Water Project supplies vary and deliveries may include transfers and storage. All deliveries are within maximum contract amount and are based upon availability, as determined by hydrology, water quality and wildlife conditions. See “METROPOLITAN’S WATER SUPPLY—State Water Project—Endangered Species Act Considerations” in this Appendix A. ~~(Footnotes continued on next page)~~
- (4) Annual totals include BDCP related costs for the fiscal years ended June 30, 2014-2015 through June 30, 2018 of \$7.2 million in ~~fiscal year 2013-2014,~~ 2019 of \$0- in each fiscal year for fiscal year years 2014-15 through and 2015-16, \$15 million in 2016-17, and \$14.8 \$24 million in 2017-18. ~~BDCP related costs are included in Capital Costs.~~ 18, and \$46 million in 2018-19. Projected BDCP costs are reflected in the ten-year financial forecast provided in the biennial budget for fiscal years 2014-15 and 2015-16 that was approved by Metropolitan’s Board on April 8, 2014.

Other Long-Term Commitments

Metropolitan also has various ongoing fixed annual obligations under its contract with the United States Department of Energy for power from the Hoover Power Plant. Under the terms of the Hoover Power Plant contract, Metropolitan purchases energy to pump water through the Colorado River Aqueduct. In fiscal year 2012-2013-13-14 Metropolitan paid approximately \$18.229.6 million under this contract. Payments made under the Hoover Power Plant contract are treated as ~~Operation and Maintenance Expenditures~~ operation and maintenance expenses. On March 12, 2014, Metropolitan and the other Hoover Contractors, funded the

defeasance of \$124 million of bonds issued by the U.S. Treasury Department for facilities related to the Hoover Dam and Power Plant. Following this repayment, Metropolitan expects to reduce its annual payment for Hoover power by approximately \$2.3 million. See “POWER SOURCES AND COSTS—Colorado River Aqueduct” in this Appendix A.

Defined Benefit Pension Plan [and Other Post-Employment Benefits](#)

Metropolitan is a member of the California Public Employees’ Retirement System (“PERS”), a multiple-employer pension system that provides a contributory defined-benefit pension for substantially all Metropolitan employees. PERS provides retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. PERS acts as a common investment and administrative agent for participating public entities within the State. PERS is a contributory plan deriving funds from employee contributions as well as from employer contributions and earnings from investments. A menu of benefit provisions is established by State statutes within the Public Employees’ Retirement Law. Metropolitan selects optional benefit provisions from the benefit menu by contract with PERS.

Metropolitan makes contributions to PERS based on actuarially determined employer contribution rates. The actuarial methods and assumptions used are those adopted by the PERS Board of Administration. Employees are required to contribute seven percent of their earnings (excluding overtime pay) to PERS. Pursuant to the current memoranda of understanding, Metropolitan contributes the requisite seven percent contribution for all employees represented by the Management and Professional Employees Association, the Association of Confidential Employees, Supervisors and Professional Personnel Association and AFSCME Local 1902 and who were hired prior to January 1, 2012. Employees in all four bargaining units who were hired on or after January 1, 2012, pay the full seven percent employee contribution to PERS. Metropolitan contributes the entire seven percent on behalf of unrepresented employees. In addition, Metropolitan is required to contribute the actuarially determined remaining amounts necessary to fund the benefits for its members.

The contribution requirements of the plan members are established by State statute and the employer contribution rate is established and may be amended by PERS. The fiscal year ~~2012-13~~[2013-14](#) contribution requirement was based on the June 30, ~~2010 valuation report, the fiscal year 2013-14 contribution requirement is based on the June 30,~~ 2011 valuation report ~~and~~, the fiscal year 2014-15 contribution requirement is based on the June 30, 2012 valuation report. ~~The June 30, 2012 valuation report includes a projected employer contribution rate for, and the fiscal year 2015-16 of 19.3 percent of annual covered payroll. contribution is based on the June 30, 2013 valuation report.~~ The PERS’ projected investment return (the discount rate) for fiscal years ~~2012-13, 2013-14 and~~[14](#), ~~2014-15 is 7.75, 7.5,~~[15](#), and ~~2015-16 is~~ [7.5](#) percent, respectively.

~~Accordingly, for~~[For](#) fiscal year ~~2012-13,~~[2013-14](#), Metropolitan contributed ~~15.0~~[16.3](#) percent of annual covered payroll. ~~In addition, from July 1, 2001 through December 31, 2011, Metropolitan paid the seven percent employees’ share of the PERS contribution for all employees.~~ The fiscal year ~~2012-13~~[2013-14](#) annual pension cost was \$~~40.7~~[47.4](#) million, of which \$~~12.8~~[13.5](#) million was for Metropolitan’s pick-up of the employees’ seven percent share. For fiscal year ~~2013-14~~[2014-15](#) and fiscal year ~~2014-15,~~[2015-16](#), Metropolitan is required to contribute ~~16.3~~[17.65](#) percent and ~~17.65~~[19.74](#) percent, respectively, of annual covered payroll, in addition to member contributions paid by Metropolitan.

On April 17, 2013, the PERS Board of Administration approved changes to the amortization and smoothing policies to spread all gains and losses over a fixed 30-year period from a rolling 30-year period, and to recognize increases or decreases in investment returns over a 5-year period versus a 15-year period. [In addition, PERS will no longer use an actuarial valuation of assets.](#) These changes will result in higher employer contribution rates in the near term but lower rates in the long term. The new policies will be effective for fiscal year 2015-~~16 and could increase the fiscal year 2015-16 rate by two percent.~~ ~~The new~~

~~valuations will be performed in the fall of 2014.~~ 16. The following table shows the funding progress of Metropolitan's pension plan.

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Metropolitan Pension Plan Assets
(dollars in billions)

Valuation Date	Accrued Liability	Actuarial Value of Assets	Market Value of Assets	Funded (Unfunded)		Funded Ratios	
				Actuarial Value	Market Value	Actuarial Value	Market Value
<u>6/30/13</u>	<u>\$1.805</u>	<u>N/A</u>	<u>\$1.356</u>	<u>N/A</u>	<u>\$.449</u>	<u>N/A</u>	<u>75.1%</u>
6/30/12	\$1.731	\$1.471	\$1.227	(\$0.260)	(\$0.504)	85.0%	70.9%
6/30/11	\$1.674	\$1.416	\$1.257	(\$0.258)	(\$0.417)	84.5%	75.1%
6/30/10	\$1.563	\$1.351	\$1.059	(\$0.212)	(\$0.504)	86.4%	67.7%
6/30/09	\$1.478	\$1.287	\$0.940	(\$0.191)	(\$0.538)	87.1%	63.6%
6/30/08	\$1.334	\$1.232	\$1.256	(\$0.102)	(\$0.078)	92.3%	94.1%
6/30/07	\$1.248	\$1.153	\$1.335	(\$0.095)	\$0.087	92.4%	107.0%

Source: California Public Employees' Retirement System.

As of June 30, 2002, the actuarial and market values of assets in Metropolitan's pension plan were approximately \$896 million and \$815 million, respectively, resulting in excess actuarial and market assets of \$95 million and \$13 million, respectively. The increase in unfunded liability since 2002 is due to the draw-down of excess assets relating to the employer pick-up of the employees' seven percent share and prior asset losses in PERS investments, and the recognition of gains and losses on an actuarial basis over a "smoothing" period. The actuarial value of PERS assets since fiscal year 2003-04 is based on a policy to smooth the market value of investments over a fifteen-year period to reduce the volatility of employers' future contributions and stabilize pension costs. However, in June 2009, the PERS Board adopted temporary modifications to the asset smoothing method in order to phase in over a three year period the impact of the 24 percent investment loss experienced in fiscal year 2008-09. In its June 2010 and June 2011 valuation reports, PERS continued the effects of the temporary modification. The phase-in provides short-term relief to local government employers and is designed to strengthen the long-term financial health of the pension funds. As described above, in its June 2013 valuation report, PERS ~~will change~~has changed its amortization and smoothing methods in setting the fiscal year 2015-16 employer contribution rates. The changes will result in higher employer contribution rates in the near term but lower rates in the long term. For more information on the plan, see Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT FOR FISCAL YEAR ENDED JUNE 30, 2014 AND BASIC FINANCIAL STATEMENTS FOR FISCAL YEARS ENDED JUNE 30, ~~2013~~2014 AND JUNE 30, ~~2012~~AND BASIC FINANCIAL STATEMENTS FOR THE SIX MONTHS ENDED DECEMBER 31, 2013 AND 2012 (UNAUDITED).2013."

Metropolitan currently provides post-employment medical insurance to retirees and pays the post-employment medical insurance premiums to PERS. On January 1, 2012, Metropolitan implemented a

longer vesting schedule for retiree medical benefits, which applies to all new employees ~~hired on or after January 1, 2012.~~ Payments for this benefit were ~~\$13.2~~13.1 million in fiscal year ~~2012-13~~2013-14 and are estimated to be ~~\$14.3~~12.8 million in fiscal year ~~2013-14~~2014-15. Under Governmental Accounting Standards Board Statement No. 45, Accounting and Financial Reporting by Employers for ~~Postemployment~~Post-employment Benefits Other Than Pensions, Metropolitan is required to account for and report the outstanding obligations and commitments related to such benefits, commonly referred to as other ~~postemployment~~post-employment benefits (“OPEB”), on an accrual basis.

Metropolitan’s annual required contribution (“ARC”) for OPEB was ~~\$53.5~~39.9 million in fiscal year ~~2012-13.~~ ~~Pay as you go contributions were \$13.2 million in fiscal year 2012-13, which represent 24.7 percent of the ARC.~~ ~~2013-14.~~ The ARC was based on a ~~January 1,~~June 30, 2011 actuarial valuation using the entry-age normal actuarial cost method with contributions determined as a level percent of pay. The actuarial assumptions included (a) a ~~4.57.25~~ percent investment rate of return, (b) a general inflation component of 3.0 percent and (c) increases to basic medical premiums of ~~9.08.5~~ percent for non-Medicare plans for ~~2013,2014,~~ grading down to 5.0 percent for 2021 and thereafter. As of ~~January 1,~~June 30, 2011, the date of the OPEB actuarial report, the unfunded OPEB liability was estimated to be ~~\$545~~367.7 million. The unfunded actuarial accrued liability is amortized over a fixed 30-year period starting with fiscal year 2007-08 and ending in 2037. Assumption changes are amortized over a fixed 20-year period. Actuarial gains and losses are amortized over a rolling 15-year period. In its biennial budget for fiscal years 2012-13 and 2013-14, Metropolitan’s Board approved contributions to an irrevocable OPEB trust fund of \$5.0 million and \$10.0 million, respectively. During fiscal year 2012-13 the Board approved funding of an additional \$25.0 million. During fiscal year 2013-14 the Board approved funding of an additional \$100.0 million. Accordingly, Metropolitan established an irrevocable OPEB trust fund in September 2013 with an initial deposit of \$40.0 million, ~~and deposited an additional \$25.0 million per month from May through August 2014.~~

A June 30, 2013 actuarial valuation was released in February of 2014. This valuation indicates that the ARC in fiscal ~~year 2013-14 is~~years 2014-15 and 2015-16 are \$29.5 million and \$30.3 million, respectively. As of June 30, 2013 the unfunded OPEB liability was estimated to be \$315 million. This actuarial valuation used the same assumptions as the ~~January 1, June 30,~~ 2011 valuation, ~~except the investment rate of return utilized was 7.25% due to the transfer of \$40 million to the OPEB trust and a commitment to fund the full ARC each year. In addition, except that~~ actuarial gains and losses are ~~now~~ amortized over a fixed 15 year period. ~~As of June 30, 2013 the unfunded OPEB liability was estimated to be \$315 million.~~ As part of its biennial budget process, the Board approved the full funding of the ARC for fiscal years 2014-15 and 2015-16, ~~the Board approved an additional \$100 million contribution to the OPEB trust.~~16.

HISTORICAL AND PROJECTED REVENUES AND EXPENSES

The “Historical and Projected Revenues and Expenses” table below, for fiscal years ~~2009-10 through~~2010-11 and 2012-13, provides a summary of revenues and expenditures of Metropolitan prepared on a cash basis, which conforms to the Revenue Bond Resolution provisions regarding rates and additional Bonds (as defined in the Master Resolution) and Parity Obligations (as defined in the Master Resolution). See “METROPOLITAN EXPENDITURES—Limitations on Additional Revenue Bonds” in this Appendix A. Under cash basis accounting, water sales revenues are recorded when received (two months after billed) and expenses when paid (approximately one month after invoiced). The actual financial reports ~~for~~beginning in fiscal year 2012-13 and the financial projections for fiscal years ~~2013-14~~2014-15 through ~~2017-18~~2018-19 are prepared on a modified accrual basis. This is consistent with the adopted biennial budget for fiscal years 2014-15 and 2015-16, which was prepared on a modified accrual basis instead of a cash basis. The table does not reflect the accrual basis of accounting, which is used to prepare Metropolitan’s annual audited financial statements. The modified accrual basis of accounting varies from the accrual basis of accounting in the following respects: depreciation and amortization will not be recorded and payments of debt service will be recorded when due and payable. Under the modified accrual basis of accounting, revenues are recognized

in the fiscal year in which they are earned and expenses are recognized when incurred. Thus water sales revenues are recognized in the month the water is sold and expenses are recognized when goods have been received and services have been rendered. The change to modified accrual accounting is for budgeting purposes and Metropolitan will continue to calculate compliance with its rate covenant, limitations on additional bonds and other financial covenants in the Resolutions in accordance with their terms.

The projections are based on assumptions concerning future events and circumstances that may impact revenues and ~~expenditures~~ expenses and represent management's best estimates of results at this time. See footnotes to the table below entitled "HISTORICAL AND PROJECTED REVENUES AND EXPENSES" and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES" for relevant assumptions, including projected water sales and average annual increase in the effective water rate, and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES" for a discussion of potential impacts. Some assumptions inevitably will not materialize and unanticipated events and circumstances may occur. Therefore, the actual results achieved during the projection period will vary from the projections and the variations may be material.

~~In addition to the Parity Bonds currently outstanding and the Bonds described in the Official Statement to which this Appendix A is attached, Metropolitan anticipates issuing approximately \$140 million aggregate principal amount of debt through fiscal year 2018-19 to finance the CIP. In September 2004 Metropolitan adopted a goal to maintain a minimum fixed charge coverage ratio, measuring total coverage of all fixed obligations (which includes all revenue bond debt service obligations, State Water Contract capital payments paid from current year operations and subordinate obligations) after payment of operating expenditures, of 1.2 times. This goal is subject to change by future action of Metropolitan's Board.~~

Estimated revenues and ~~expenditures~~ expenses in the table below ~~are based on assumptions and estimates used in the adopted~~ reflect the ten-year financial forecast provided in the biennial budget for fiscal years 2014-15 and 2015-~~16, and reflect~~ 16 that was approved on April 8, 2014, and the projected issuance of additional bonds. ~~Projections for fiscal year 2013-14 include actual financial results for July 2013 through March 2014 with revised projections for the balance of the~~ Metropolitan anticipates issuing approximately \$140 million aggregate principal amount of debt through fiscal year 2018-19 to finance the CIP. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Revenues" in this Appendix A.

The projections in the table below assume that water sales will be ~~2.02 million acre feet in fiscal year 2013-14, and~~ 1.75 million acre-feet in fiscal year 2014-15 through fiscal year ~~2017-18, 2018-19,~~ respectively. Rates and charges will increase by 1.5 percent on January 1, 2015 and 1.5 percent on January 1, 2016. Rates and charges are projected to increase 3.0 percent to 5.0 percent annually thereafter. Actual rates and charges to be effective in 2017 and thereafter are subject to adoption by Metropolitan's Board. The projections were prepared by Metropolitan and have not been reviewed by independent certified public accountants or any entity other than Metropolitan. Dollar amounts are rounded.

Metropolitan's resource planning projections are developed using a comprehensive analytical process that incorporates demographic growth projections from recognized regional planning entities, historical and projected data acquired through coordination with local agencies, and the use of generally accepted empirical and analytical methodologies. See "METROPOLITAN'S WATER SUPPLY—Integrated Water Resources Plan" and "—The Integrated Resources Plan Strategy" in this Appendix A. Metropolitan has conservatively set the water sales projections in the following table which are below its projections for resource planning purposes. Metropolitan estimates that its water sales projections have a seventy percent statistical likelihood of being exceeded, compared to the fifty percent exceedance levels in the projections of water sales used to set prior years' budgets and rates. Nevertheless, Metropolitan's assumptions have been questioned by directors representing SDCWA on Metropolitan's Board. Metropolitan has reviewed SDCWA's concerns and, while recognizing that assumptions may vary, believes that the estimates and assumptions that support

Metropolitan's projections are reasonable based upon history, experience and other factors as described above.

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HISTORICAL AND PROJECTED REVENUES AND EXPENSES^(a)
(Dollars in Millions)

	Actual			Projected						
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
	<u>1</u>	<u>12</u>								
Water Sales ^(b)	\$1,011	\$996	\$1,062	\$1,283	\$1,469	\$1,296	\$1,314	\$1,337	\$1,378	\$1,422
	<u>96</u>	<u>062</u>			<u>5</u>			<u>1,338</u>		
Additional Revenue Sources ^(c)	<u>135</u>	<u>153</u>	<u>168</u>	173	182	199	199	196	198	202
Total Operating Revenues	<u>1,146</u>	<u>1,149</u>	<u>1,230</u>	1,456	<u>1,651</u>	1,495	1,513	<u>1,543</u>	1,576	<u>1,624</u>
	<u>49</u>	<u>230</u>						<u>534</u>		
O&M, CRA Power and Water Transfer Costs ^(d)	<u>(551)</u>	<u>(531)</u>	<u>(476)</u>	(456)	<u>(559)</u>	(567)	(577)	(587)	(613)	<u>(640)</u>
Total SWC OMP&R and Power Costs ^(e)	<u>(274)</u>	<u>(322)</u>	<u>(316)</u>	(337)	<u>(284)</u>	(361)	<u>(374)</u>	<u>(396)</u>	<u>(408)</u>	<u>(425)</u>
	<u>6</u>									
Total Operation and Maintenance	<u>(825)</u>	<u>(853)</u>	<u>(792)</u>	(793)	<u>(843)</u>	(928)	<u>(951)</u>	<u>(983)</u>	<u>(1,021)</u>	<u>(1,065)</u>
	<u>2</u>									
Net Operating Revenues	\$ <u>321</u>	\$ <u>296</u>	\$ <u>438</u>	\$ 663	\$ <u>808</u>	\$ 567	\$ 562	\$ 551	\$ 555	\$ <u>559</u>
Miscellaneous Revenue ^(f)	<u>33</u>	<u>74</u>	<u>56</u>	23	<u>18</u>	17	18	18	18	<u>18</u>
Sales of Hydroelectric Power ^(g)	<u>19</u>	<u>22</u>	<u>31</u>	25	<u>15</u>	19	19	20	21	<u>21</u>
Interest on Investments ^(h)	<u>19</u>	<u>17</u>	<u>11</u>	(2)	<u>15</u>	16	28	33	32	<u>32</u>
	<u>171</u>									
Adjusted Net Operating Revenues ⁽ⁱ⁾	<u>392</u>	<u>409</u>	<u>536</u>	709	<u>857</u>	<u>620</u>	<u>626</u>	622	<u>625</u>	<u>630</u>
Bonds and Additional Bonds Debt Service ^(j)	<u>(244)</u>	<u>(277)</u>	<u>(297)</u>	(298)	<u>(342)</u>	(276)	(309)	(310)	(313)	<u>(307)</u>
	<u>7</u>									
Subordinate Revenue Obligations ^(k)	<u>(1)</u>	<u>(1)</u>	<u>(1)</u>	(1)	(1)	(1)	(1)	(1)	(1)	<u>(1)</u>
Funds Available from Operations	\$ -	\$ <u>431</u>	\$ <u>238</u>	\$ 410	\$ <u>514</u>	\$ <u>343</u>	\$ <u>316</u>	\$ 311	\$ <u>311</u>	\$ <u>322</u>
	<u>147</u>	<u>131</u>	<u>238</u>			<u>342</u>	<u>317</u>	<u>2</u>		
Bonds and Additional Bonds Debt Service Coverage ^(l)	<u>1.61</u>	<u>1.48</u>	<u>1.81</u>	2.38	<u>2.51</u>	<u>2.25</u>	2.03	<u>2.00</u>	2.00	<u>2.06</u>
	<u>1</u>							<u>1</u>		
Debt Service Coverage on all Obligations ^(m)	<u>1.60</u>	<u>1.47</u>	<u>1.80</u>	2.37	<u>2.50</u>	<u>2.24</u>	2.02	2.00	<u>2.00</u>	<u>2.05</u>
	<u>0</u>							<u>9</u>		
Funds Available from Operations	\$ <u>147</u>	\$ <u>131</u>	\$ <u>238</u>	\$ 410	\$ <u>514</u>	\$ <u>343</u>	\$ <u>316</u>	\$ 311	\$ <u>311</u>	\$ <u>322</u>
	<u>131</u>					<u>342</u>		<u>2</u>		
Other Revenues (Expenditures/Expenses)	<u>(5)</u>	<u>(2)</u>	<u>(3)</u>	(5)	<u>(8)</u>	(8)	(8)	(8)	(9)	<u>(9)</u>
Pay-As-You Go Construction	<u>(35)</u>	(45)	<u>(45)</u>	(55)	<u>(125)</u>	(245)	(221)	(200)	(204)	<u>(201)</u>
Water Transfer Capital Costs	<u>(12)</u>	<u>0</u>	<u>0</u>	-0-	-0-	-0-	-0-	-0-	-0-	<u>0</u>
Total SWC Capital Costs Paid from Current	<u>(115)</u>	<u>(119)</u>	<u>(112)</u>	(88)	<u>(79)</u>	(68)	(72)	(83)	(84)	<u>(89)</u>
Remaining Funds Available from Operations	<u>(20)</u>	<u>(35)</u>	<u>77</u>	262	<u>302</u>	<u>221</u>	<u>15</u>	<u>21</u>	<u>14</u>	<u>23</u>
Fixed Charge Coverage ⁽ⁿ⁾	<u>1.09</u>	<u>1.03</u>	<u>1.0</u>	1.83	<u>2.03</u>	<u>1.80</u>	1.64	1.58	1.5	<u>1.59</u>
	<u>1.03</u>					<u>1.7</u>				

	<u>1</u>			<u>9</u>						
Property Taxes	<u>97</u>	90	95	<u>90</u>	90	92	94	96	<u>99</u>	
	<u>88</u>	<u>8890</u>								
General Obligation Bonds Debt Service	<u>(4839)</u>	(39)	(39)	(40)	(40)	(23)	(23)	(23)	(19)	<u>(14)</u>
SWC Capital Costs Paid from Taxes	(49)	<u>(4951)</u>	(51)	(55)		(67)	(69)	(71)	(7877)	<u>(85)</u>
				(5055)						
Net Funds Available from Current Year ^(a)	<u>\$(2035)</u>	<u>\$(35)77</u>	<u>\$77</u>	\$262	<u>\$302331</u>	<u>\$2221</u>	<u>\$1516</u>	<u>\$2120</u>	\$14	<u>\$22</u>
PAYGO Funded from Prior Year Revenues					<u>\$(25)</u>		\$(47)	\$(75)	\$(32)	

Source: Metropolitan.

- (a) Unaudited. Prepared on a cash basis for fiscal years ended June 30, ~~2010~~2011 through fiscal year ending June 30, 2012, and on a modified accrual basis for fiscal years ending June 30, 2013 through June 30, ~~2018~~2019. Projected revenues and expenditures are based on assumptions and estimates used in the adopted 2014-15 and 2015-16 biennial budget and reflect the projected issuance of additional bonds. Projected revenues and expenditures for fiscal year 2013-14 include actual financial results for July 2013-March 2014 with revised projections for the balance of the fiscal year.

(Footnotes continued on next page)

- (b) During the fiscal years ended June 30, ~~2010~~2011 through June 30, ~~2013~~2014, annual water sales (in acre-feet) were ~~1.86 million~~, 1.63 million, 1.68 million (including 225,000 acre-feet of replenishment sales), ~~and~~1.86 million, and 2.04 million, respectively. See "METROPOLITAN REVENUES—Water Sales Revenues," the table entitled "SUMMARY OF WATER SOLD AND WATER SALES" in this Appendix A. The water sales projections are ~~based upon estimated annual water sales (in acre-feet) of 2.02 million in fiscal year 2013-14 and~~ 1.75 million in fiscal years 2014-15, 2015-16, 2016-~~17 and~~17, 2017-~~18, 18,~~ and 2018-19. Projections reflect Board adopted rate and charge increases of 1.5 percent, which will become effective on January 1, 2015 and 1.5 percent, which will become effective on January 1, 2016. Rates and charges are projected to increase 3.0 percent to 5.0 percent per fiscal year thereafter, subject to adoption by Metropolitan's Board. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES" below.
- (c) Includes receipts from water standby, readiness-to-serve and capacity charges. The term Operating Revenues excludes *ad valorem* taxes. See "METROPOLITAN REVENUES — Additional Revenue Components" in this Appendix A.
- (d) Water Transfer Costs are included in ~~Operation and Maintenance Expenditures~~operation and maintenance expenses for purposes of calculating the debt service coverage on all Obligations.
- (e) Includes on and off aqueduct power and operation, maintenance, power and replacement costs payable under the State Water Contract. See "METROPOLITAN EXPENDITURES—State Water Contract Obligations" in this Appendix A.
- (f) ~~Includes~~May include lease and rental net proceeds, net proceeds from sale of surplus property, reimbursements, and federal interest subsidy payments for Build America Bonds, ~~of \$6.6 million in fiscal year 2009-10, \$3.6 million in fiscal year 2010-11, \$6.6 million in fiscal year 2011-12 and \$13 million in each fiscal year from 2012-13 through fiscal year 2017-18.~~ Federal interest subsidy payments for Build America Bonds in fiscal years ~~2012-13~~2014-15 to ~~2017~~2018-19 are projected to be \$12.2 million and reflect a ~~7-27.3~~ percent reduction pursuant to federal budget sequestration. Includes in fiscal year 2010-11, \$8 million from surplus property sales and a \$28.2 million capital reimbursement received from the Calleguas Municipal Water District in fiscal year 2010-11 related ~~to~~ to termination of the Las Posas water storage program. See "REGIONAL WATER RESOURCES—Local Water Supplies—*Groundwater Storage Programs*" in this Appendix A. Also includes in fiscal year 2011-12 \$27.5 million from CVWD for delivery of 105,000 acre-feet under an exchange agreement between Metropolitan and CVWD. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct—*Quantification Settlement Agreement*" in this Appendix A.
- (g) Includes Colorado River Aqueduct power sales.
- (h) Does not include interest applicable to Bond Construction Funds, the Excess Earnings Funds, other trust funds and the Deferred Compensation Trust Fund. Fiscal year 2012-13 included Fair Value Adjustment of \$(13.8) million, as per modified accrual accounting.
- (i) Adjusted Net Operating Revenues is the sum of all available revenues that the revenue bond resolutions specify may be considered by Metropolitan in setting rates and issuing additional Bonds and Parity Obligations.
- (j) Includes debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011 and additional Bonds (projected). Assumes issuance of additional Bonds as provided in budget assumptions for the adopted biennial budget for fiscal years 2014-15 and 2015-16 as follows: \$-0- in each fiscal year for fiscal year 2014-15 through fiscal year 2016-17 ~~and~~ \$40 million in fiscal year 2017-~~18, 18,~~ and \$100 in fiscal year 2018-19. For fiscal years 2013-14 and 2014-15, reflects the defeasance of the 2004 Series B ~~bonds~~Water Revenue Refunding Bonds, payable on July 1, 2014, through a payment of Metropolitan funds to an escrow account on May 29, 2014. See "CAPITAL INVESTMENT PLAN—Capital Investment Plan Financing" in this Appendix A.
- (k) Consisting of subordinate lien California Safe Drinking Water Revolving Fund Loan debt service. ~~For fiscal years 2013-14 and 2014-15, reflects the defeasance of the 2004 Series B bonds, payable on July 1, 2014, through a payment of Metropolitan funds to an escrow account on May 29, 2014. See "METROPOLITAN EXPENDITURES—Subordinate Revenue Obligations" in this Appendix A.~~
- (l) Adjusted Net Operating Revenues divided by the sum of debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011 and additional Bonds (projected). For fiscal years 2013-14 and 2014-15, reflects the defeasance of the 2004 Series B ~~bonds~~Water Revenue Refunding Bonds, payable on July 1, 2014, through a payment of Metropolitan funds to an escrow account on May 29, 2014.

- (m) Adjusted Net Operating Revenues, divided by the sum of debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011, the subordinate lien California Safe Drinking Water Revolving Fund Loan and additional Bonds (projected). See “METROPOLITAN EXPENDITURES—Subordinate Revenue Obligations” in this Appendix A. For fiscal years 2013-14 and 2014-15, reflects the defeasance of the 2004 Series B ~~bonds~~Water Revenue Refunding Bonds, payable on July 1, 2014, through a payment of Metropolitan funds to an escrow account on May 29, 2014.
- (n) Adjusted Net Operating Revenues, divided by the sum of State Water Contract capital costs paid from current year operations and debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011, the subordinate lien California Safe Drinking Water Revolving Fund Loan, and additional Bonds (projected). For fiscal years 2013-14 and 2014-15, reflects the defeasance of the 2004 Series B ~~bonds~~Water Revenue Refunding Bonds, payable on July 1, 2014, through a payment of Metropolitan funds to an escrow account on May 29, 2014.
- (o) For Fiscal Year 2012-13, includes amounts that were transferred prior to June 30, 2013: \$25 million to the Water Transfer Fund, \$25 million to a trust to pre-fund Metropolitan’s unfunded liability for other post-employment benefits, and \$25 million for PAYGO Construction. For Fiscal Year 2013-14, includes amounts ~~expected to be~~ transferred prior to June 30, 2014: \$100 million to a trust to pre-fund Metropolitan’s unfunded liability for other post-employment benefits; \$100 million for PAYGO Construction; an amount currently estimated at ~~\$150~~232 million to the Water Management Fund for water purchases to replenish storage and funding drought response programs. See “METROPOLITAN REVENUES-Financial Reserve Policy” in this Appendix A.

MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES

Water Sales Revenues

Metropolitan relies on revenues from water sales for about ~~75~~80 to ~~80~~85 percent of its total revenues. In adopting the budget and rates and charges for each fiscal year, Metropolitan’s board reviews the anticipated revenue requirements and projected water sales to determine the rates necessary to produce substantially the revenues to be derived from water sales during the fiscal year. Metropolitan sets rates and charges estimated to provide operating revenues sufficient, with other sources of funds, to provide for payment of its expenses. See “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

Metropolitan’s Board has adopted annual increases in water rates each year beginning with the rates effective January 1, 2004. See “METROPOLITAN REVENUES—Rate Structure” and “—Classes of Water Service” in this Appendix A. On April 10, 2012, Metropolitan’s Board adopted water rate increases of 5.0 percent, effective January 1, 2013 and January 1, 2014. On April 8, 2014, Metropolitan’s Board adopted a 1.5 percent water rate increase, to become effective January 1, 2015, and an additional 1.5 percent water rate increase to become effective January 1, 2016.

The financial projections in the table above reflect the ten-year financial forecast provided in the biennial budget for fiscal years 2014-15 and 2015-16 that was approved by the Board on April 8, 2014. The 2014-15 and 2015-16 biennial budget and rates set the stage for predictable and reasonable rate increases over the ten-year planning period, with rates projected to increase 3.0 percent to 5.0 percent per year. Actual rates and charges to be effective in 2017 and thereafter are subject to adoption by Metropolitan’s Board as part of the biennial budget process, and the ten-year forecast will be updated as well.

Increases in rates and charges reflect increasing operations and maintenance costs due primarily to an increase in retirement-related benefit costs, ~~financing requirements~~higher pay-as-you-go funding levels for the next two fiscal years of approximately \$513 million for the CIP, and increasing State Water Project costs when compared to fiscal year 2013-14. ~~On April 10, 2012, Metropolitan’s Board adopted water rate increases of 5.0 percent, effective January 1, 2013 and January 1, 2014. On April 13, 2010, Metropolitan’s Board adopted water rate increases of 7.5 percent, effective January 1, 2011 and January 1, 2012. However,~~ higher levels of revenue funding for the CIP and the use of reserves over target reduce revenue requirements in the later years of the forecast.

Metropolitan ~~is projecting’s~~ revenues ~~will exceed~~exceeded expenses during fiscal year 2013-14, resulting in a substantial increase in its unrestricted reserves ~~by as of~~ as of June 30, 2014. Metropolitan’s unrestricted reserves ~~are projected to be \$839~~were \$487 million on June 30, 2014, on a modified accrual

basis. ~~This amount of unrestricted reserves would be \$352 million over the target reserve level for fiscal year 2013-14. (See “METROPOLITAN REVENUES—Financial Reserve Policy.”) On April 8, 2014, Metropolitan’s Board approved the use of unrestricted reserves over the target level at June 30, 2014 as follows: \$100 million deposit to the Renewal and Replacement and Refurbishment Fund for pay-as-you-go funding of the CIP; \$100 million deposited to the Other Post-Employment Benefits (OPEB) Trust; and ~~any~~the remaining ~~amounts~~amount of over target (~~currently estimated at \$150~~reserve levels, \$252 million), to a Water Management Fund ~~to, \$232 million of which will~~ cover costs associated with replenishing storage, purchasing transfers and funding drought response programs. ~~The target reserve level on June 30, 2013, was calculated to be \$474 million and the minimum reserve requirement as of June 30, 2013, was calculated to be \$198 million. The actual fund balances in the Water Rate Stabilization Fund and the Revenue Remainder Fund on June 30, 2013 totaled \$536 million, and \$20 million for conservation related programs.~~ These amounts include ~~\$93.1~~137 million held in Metropolitan’s financial reserves pursuant to the exchange contract between Metropolitan and SDCWA due to SDCWA’s litigation challenging Metropolitan’s rate structure (see “METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority” and “METROPOLITAN REVENUES—Litigation Challenging Rate Structure” in this Appendix A) ~~and exclude \$7.2 million held as collateral by Metropolitan’s swap counterparties (see “METROPOLITAN EXPENDITURES—Variable Rate and Swap Obligations”). “METROPOLITAN REVENUES—Financial Reserve Policy” and “CAPITAL INVESTMENT PLAN—Capital Investment Plan Financing” in this Appendix A.~~~~

~~The financial projections in the table above reflect the ten year financial forecast provided in the biennial budget for fiscal years 2014/15 and 2015/16 that was approved on April 8, 2014. The projections include the Board’s actions to increase water rates and charges by 1.5 percent, to be effective January 1, 2015 and 1.5 percent to be effective January 1, 2016 and use of reserves over target as described above. The 2014/15 and 2015/16 biennial budget and rates set the stage for predictable and reasonable rate increases over the ten year planning period. Higher levels of revenue funding for the CIP and the use of reserves over target reduce revenue requirements in the later years of the forecast. Rates are projected to increase 3.0 percent to 5.0 percent per year thereafter for the remainder of the ten year planning period. Actual rates and charges to be effective in 2017 and thereafter are subject to adoption by Metropolitan’s Board as part of the biennial budget process, and the ten year forecast will be updated as well.~~

Water Sales Projections

Water sales forecasts in the table above are: ~~2.02 million acre-feet in fiscal year 2013-14 and~~ 1.75 million acre-feet in fiscal years 2014-15 through ~~2017-18, 2018-19.~~ For purposes of comparison, Metropolitan’s highest water sales during the past six fiscal years was approximately 2.3 million acre-feet in fiscal year 2007-08 and lowest was 1.63 million acre-feet in fiscal year ~~2011-2010-11.~~ See “METROPOLITAN REVENUES—Water Sales Revenues” in this Appendix A.

Metropolitan’s water sales projections are the result of a comprehensive retail demand, conservation, and local supply estimation process, including supply projections from member agencies and other water providers within Metropolitan’s service area. Retail demands for water are estimated with a model driven by projections of relevant demographics provided by SCAG and SANDAG. Retail demands are adjusted downward for conservation savings and local supplies, with the remainder being the estimated demand for Metropolitan supplies. Conservation savings estimates include all conservation programs in place to date as well as estimates of future conservation program goals that will result from regional 20 percent reductions by 2020 conservation savings. See “METROPOLITAN’S WATER SUPPLY—Water Conservation” in this Appendix A. Local supplies include water produced by local agencies from various sources including but not limited to groundwater, surface water, locally-owned imported supplies, and recycled water (see “REGIONAL WATER RESOURCES”). For example, water sales projections for both years of the biennial budget for fiscal years 2014/~~15~~ and 2015/~~16~~ assume that local projects such as groundwater recovery and desalination projects (see “REGIONAL WATER RESOURCES—Local Water Supplies”) will become

operational and produce local supplies in 2016. For additional description of Metropolitan’s water sales projections, see “HISTORICAL AND PROJECTED REVENUES AND EXPENSES” in this Appendix A.

The water sales projections used to determine water rates and charges assume an average year hydrology. Actual water sales are likely to vary from projections. Over the ten-year period from fiscal- year ~~2003-04~~2004-05 through ~~2012-13~~,fiscal year 2013-14, actual water sales exceeded budgeted sales for the fiscal year ~~in five fiscal years, with the greatest positive variance in fiscal year 2005-06 when actual sales of 2.2 million acre feet were 114 percent of budgeted sales (1,895,730 acre feet).~~ Actual sales were less than budgeted sales in five fiscal years, with the greatest negative positive variance in fiscal year 2013-14 when actual sales of 2.04 million acre-feet were 120 percent of budgeted sales (1.70 million acre-feet). Actual sales were less than budgeted sales in five fiscal years, with the greatest negative variance in fiscal year 2010-11 when actual sales of 1,632,2771.63 million acre-feet were ~~85~~84 percent of budgeted sales (~~1,927,875 acre feet~~). ~~Over the ten fiscal years from 2003-04 through 2012-13, average actual sales were 100 percent of average budgeted sales. In fiscal year 2012-13, actual sales were 1,856,685 acre feet, representing 109 percent of budgeted sales of 1,700,000 acre feet~~1.93 million acre-feet). In years when actual sales exceed projections, the revenues from water sales during the fiscal year will exceed budget, potentially resulting in an increase in financial reserves. In years when actual sales are less than projections, Metropolitan uses various tools to manage reductions in revenues, such as reducing expenses below budgeted levels, reducing funding of capital from revenues, and drawing on reserves. See “METROPOLITAN REVENUES—Financial Reserve Policy” in this Appendix A. Metropolitan considers actual sales, revenues and expenses, and financial reserve balances in setting rates for future fiscal years.

Operation and Maintenance ~~Expenditures~~Expenses

Operation and maintenance ~~expenditures~~expenses in fiscal year ~~2012-13~~2013-14 were ~~\$793~~\$854 million, which represented approximately ~~60~~57 percent of total costs. These ~~expenditures~~expenses include the costs of labor, electrical power, materials and supplies of both Metropolitan and its contractual share of the State Water Project. The cost of power for pumping water through the aqueducts is a major component of this category of expenditures.

~~The 2013-14 projected operation and maintenance expenditures are \$843 million.~~ Metropolitan’s Board adopted a budget benchmark in September 2004 to limit the annual increase in departmental operations and maintenance budgets to no more than the five-year rolling average change in the Los Angeles/Orange/Riverside Counties consumer price index. The ~~projected~~ fiscal year 2013-14 departmental ~~expenditures~~expenses of ~~\$384~~\$369 million ~~is~~were approximately ~~+1.3~~7.0 percent and ~~+0.7~~6.4 percent higher than ~~expenditures~~expenses in fiscal years 2012-13 and 2011-12, respectively.

POWER SOURCES AND COSTS

General

Current and future costs for electric power required for operating the pumping systems of the Colorado River Aqueduct and the State Water Project are a substantial part of Metropolitan's overall expenses. Expenditures for electric power for the Colorado River Aqueduct (not including credits from power sales and related revenues) for the fiscal years ~~2010-11~~, 2011-~~12~~ and 12, 2012-13 and 2013-14 were approximately ~~\$46.9 million~~, \$30.0 million ~~and~~, \$18.4 million, and \$29.6 million, respectively. Expenditures for electric power and transmission service for the State Water Project for fiscal years ~~2010-11~~, 2011-~~12~~ and 12, 2012-13 and 2013-14 were approximately ~~\$189.8~~214.1 million, ~~-\$214.1~~, and \$218.1 million and \$157.4 million, respectively. Given the continuing uncertainty surrounding the electricity markets in California and in the electric industry in general, Metropolitan is unable to give any assurance with respect to the magnitude of future power costs.

Colorado River Aqueduct

Generally 55 to 70 percent of the annual power requirements for pumping at full capacity (1.25 million acre-feet of Colorado River water) in Metropolitan's Colorado River Aqueduct are secured through long-term contracts with the United States Department of Energy for energy generated from facilities located on the Colorado River (Hoover Power Plant and Parker Power Plant) and Edison. These contracts provide Metropolitan with reliable and economical power resources to pump Colorado River water to Metropolitan's service area.

On December 20, 2011, President Obama signed into law the Hoover Power Allocation Act of 2011 (H.R. 470). This new law requires the Western Area Power Administration to renew existing contracts for electric energy generated at the Hoover Power Plant for an additional 50 years through September 2067. The contractors will retain 95 percent of their existing power rights. The law will allow Metropolitan to continue to receive a significant amount of power from the Hoover power plant after the current contract expires in 2017.

The remaining approximately 30 to 45 percent of annual pumping power requirements for full capacity pumping on the Colorado River Aqueduct is obtained through energy purchases from municipal and investor-owned utilities or power marketers. Gross diversions of water from Lake Havasu for the fiscal years ended June 30, ~~2012~~2013 and June 30, ~~2013~~2014 were approximately ~~724,413 acre-feet and 767,574~~767,622 acre-feet and 1,117,578 acre-feet, respectively, including Metropolitan's basic apportionment of Colorado River water and supplies from water transfer and groundwater storage programs.

The Metropolitan-Edison 1987 Service and Interchange Agreement includes provisions for the sharing of the benefits realized by the integrated operation of Edison's and Metropolitan's electric systems. Under this agreement, with a prior year pumping operation of 1 million acre-feet, Edison provides Metropolitan additional energy (benefit energy) sufficient to pump approximately 140,000 acre-feet annually. As the amount of pumping is increased, the amount of benefit energy provided by Edison is reduced.

Under maximum pumping conditions, Metropolitan can require up to one million megawatt-hours per year in excess of the base resources available to Metropolitan from the Hoover Power Plant, the Parker Power Plant, and Edison benefit energy. Metropolitan is a member of the Western Systems Power Pool ("WSPP"), and utilizes its industry standard form contract to make wholesale power purchases at market cost. Metropolitan acquires the majority of its supplemental power from WSPP members. In calendar years 2010 and 2011, Metropolitan purchased 755,000 megawatt-hours and 100,000 megawatt-hours, respectively, of energy above its base power resources. In calendar year 2013, Metropolitan pumped approximately 1.013 million acre-feet of its Colorado River water and additional supplies from other Colorado River sources but did not purchase any additional energy supplies above its base power resources.

State Water Project

The State Water Project's power requirements are met from a diverse mix of resources, including State-owned hydroelectric generating facilities. DWR has long-term contracts with Morgan Stanley (unspecified energy sources), Metropolitan (hydropower), Kern River Conservation District (hydropower) and the Northern California Power Agency (natural gas generation). The remainder of its power needs is met by short-term purchases. Metropolitan pays approximately 70 percent of State Water Project power costs.

DWR is seeking renewal of the license issued by FERC for the State Water Project's Hyatt-Thermalito hydroelectric generating facilities at Lake Oroville. A Settlement Agreement containing recommended conditions for the new license was submitted to FERC in March 2006. That agreement was signed by over 50 stakeholders, including Metropolitan and other State Water Project ~~contractors~~ Contractors. With only a few minor modifications, FERC staff recommended that the Settlement Agreement be adopted as the condition for the new license. DWR issued a Final EIR for the relicensing project on July 22, 2008. On August 21, 2008, Butte County and Plumas County filed separate lawsuits against DWR challenging the adequacy of the Final EIR. This lawsuit also named all of the signatories to the Settlement Agreement as "real parties in interest," since they could be adversely affected by this litigation. A trial was conducted in January 2012. On May 16, 2012, the court found that the EIR prepared in conjunction with the relicensing was adequate and dismissed the lawsuit against DWR. On August 7, 2012, Butte and Plumas Counties filed a notice of appeal. Briefing on the appeal was completed in May 2013. No date has been set for oral argument. Regulatory permits and authorizations are required before the new license can take effect. Chief among these is a biological opinion from the National Marine Fisheries Service setting forth the terms and conditions under which the relicensing project must operate in order to avoid adverse impacts to threatened and endangered species. DWR has filed an application requesting this biological opinion. FERC has issued one-year renewals of the existing license since its initial expiration date on January 31, 2007, and is expected to issue successive one-year renewals until a new license is obtained.

DWR receives transmission service from investor-owned utilities under existing contracts and from the California Independent System Operator, a nonprofit public benefit corporation formed in 1996 pursuant to legislation that restructured and deregulated the electric utility industry in California. The transmission service provider may seek increased transmission rates, subject to the approval of FERC. DWR has the right to contest any such proposed increase. DWR may be subject to increases in the cost of transmission service as new electric grid facilities are constructed.

Energy Management Program

Metropolitan staff completed a comprehensive Energy Management and Reliability Study in late 2009 and Metropolitan's Board adopted energy management policies in August 2010 that provide objectives for future energy-related projects to contain costs and reduce Metropolitan's exposure to energy price volatility, increase operational reliability through renewable energy projects, provide a revenue stream to offset energy costs and move Metropolitan toward energy independence.

Metropolitan's Energy Management Program mandates that Metropolitan design and operate its facilities in the most energy-efficient and cost-effective manner. This program includes: setting design standards for energy-efficient facilities; taking advantage of available rebates for energy efficiency and energy-saving projects; operating Metropolitan's facilities in the most energy-efficient manner; and continuing to investigate alternative energy sources, such as solar and wind power. Metropolitan has completed energy efficiency assessments at all five of its water treatment plants and is evaluating recommendations for proposed changes. Metropolitan has completed construction of a one-megawatt solar generation facility at the Robert A. Skinner Treatment Plant and is investigating additional solar power generation at other treatment plants and facilities. Metropolitan has begun integrating fuel-efficient hybrid vehicles into its fleet and assessing the use of alternative fuels (biodiesel) for its off-road vehicles and

construction equipment. Finally, Metropolitan is assessing the feasibility of expanding its hydroelectric generation capabilities.

In February 2007, the Board authorized Metropolitan's membership in the California Climate Action Registry, a nonprofit voluntary registry for greenhouse gas emissions that was established by the Legislature in 2000. Metropolitan began annual reporting of its certified baseline greenhouse gas inventory, or carbon footprint, in calendar year 2005 to the California Climate Action Registry. In calendar year 2010, Metropolitan's emissions reporting transitioned from the California Climate Action Registry to The Climate Registry, a nonprofit North American emission registry. Metropolitan also reports required emissions data to the California Air Resources Board ("CARB") under mandatory reporting regulations adopted pursuant to AB 32, California's Global Warming Solutions Act. On December 16, 2010, CARB adopted a regulation for a California cap on greenhouse gas emissions under AB 32, and after additional workshops, public comment and further consideration, approved the regulation on October 20, 2011, with compliance deferred to 2013. Under the regulation, Metropolitan is regulated as an importer of energy and is required to purchase allowances to cover any greenhouse gas emissions associated with its supplemental imported energy. Metropolitan did not incur cap and trade allowance obligations in 2013. ~~The need for supplemental imported energy and resulting~~ However, Metropolitan will incur an obligation in 2014 and possibly in later years. As of October 2014, Metropolitan has spent approximately \$3.3 million on cap and trade compliance instruments, such as allowances for 2014, if any, cannot be determined at this time. — and offsets.

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THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

May 19, 2014

Director Michael T. Hogan
Director Keith Lewinger
Director Vincent Mudd
Director Fern Steiner
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated May 12, 2014 regarding Board Letter 8-2

This letter addresses your comments dated May 12, 2014 on Draft Appendix A to the Official Statement for Metropolitan's Special Variable Rate Water Revenue Refunding Bonds, 2014 Series D, attached to Board Letter 8-2. Your general comments are addressed below, followed by your specific comments and Metropolitan's responses.

Appendix A provides material financial and operating information about Metropolitan to potential investors. Appendix A is prepared by Metropolitan staff. Bond counsel does not serve as disclosure counsel and will not be responding to your letter. Metropolitan's objective is to provide complete and accurate disclosure regarding the bonds being offered and their security and source of payment to potential investors, not to promote Metropolitan's position in any litigation. Appendix A is updated for each bond offering to provide current information. Forward-looking statements or projections are based on current information such as the facts and assumptions contained within the biennial budget and ten-year financial forecast.

The ***General Comments*** in your letter show continuing, purposeful misstatements about Metropolitan's current financial planning documents and a general lack of recognition of Metropolitan's Board-adopted policies. The biennial budget and ten-year financial forecast adopted in April 2014 comprise Metropolitan's long-range finance plan and replace the financial forecast in the previous long-range finance plan adopted by the Board in 2004. Incorporating a ten-year financial forecast within the biennial budget helps ensure that the long-range financial plan will be updated every two years.

Water rates and charges are set by the Board using projected costs of service for the budget period, and normal sales assumptions to produce stable, predictable rates. For the past two years, sales have exceeded projections, primarily due to exceptionally dry weather, a rebounding economy and other factors. In April 2014, the Board approved the use of reserves anticipated to be over the Board-adopted reserve target. As you know, in prior years when sales did not meet budget projections Metropolitan drew down reserves to meet costs as required.

Projected costs of service – how much money Metropolitan needs to provide its service – are presented and scrutinized in public board and committee meetings and workshops over a three-month budget process. This year, in the budget and rates actions the Board approved use of reserves over target to reduce future obligations, keep future rate increases reasonable and provide funding for drought response programs, in accordance with Metropolitan’s policy that requires Board direction for use of these funds. Characterizing Metropolitan’s detailed, open and public budget and rate setting procedures as using “massive over collections ... any way it wants” is both irresponsible and a deliberate misrepresentation of the facts.

Regarding accounting terminology referencing revenues and expenses (and receipts and expenditures), the revisions in Appendix A were made to more accurately reflect the appropriate basis of accounting (cash basis or accrual basis) for the applicable information.

Comments on Draft Appendix A dated April 30, 2014

The following specific SDCWA comments and Metropolitan’s responses refer to the draft dated April 30, 2014 of Appendix A, showing changes from the November 25, 2013 draft (Attachment 2).

A-4: Drought Response Actions. MWD lacks a comprehensive board policy guiding the use and replenishment of storage reserves to meet dry-year demands. While MWD may have sufficient water in storage to meet full demands this year, the use of more than 1 million acre-feet – or, almost one half -- of MWD’s reserves in one year as currently planned poses a great risk to MWD’s water supply reliability next year and in future years, should the drought continue. Appendix A should disclose that risk and MWD’s plan to mitigate the risk and related impacts to MWD’s revenues and finances. MWD should also disclose where it expects to secure supplemental water transfers and purchases to meet regional demands under current conditions.

Metropolitan Response: As most recently presented at the Water Planning and Stewardship Committee on May 12, 2014, Metropolitan’s Water Surplus and Drought Management Plan (“WSDM Plan”) was adopted by Metropolitan’s Board in 1999. The WSDM Plan is a comprehensive board policy that guides the use of storage reserves. Its guiding principle is to “encourage storage of water during periods of surplus and work jointly with its member agencies to minimize the impact of water shortages on the region’s retail customers and economy during periods of shortage.” The WSDM Plan includes a matrix of stages and actions that describe operational preferences under

surplus and shortage conditions. This comprehensive plan is described in Appendix A under "Water Conservation" on page A-30.

Further, the Board reviews available storage and the need to preserve storage for future use when it considers declaring a "Regional Shortage Level" under the Water Supply Allocation Plan. This Plan is described in Appendix A under "Water Supply Allocation Plan" on page A-31. References to these discussions of the WSDM and Water Supply Allocation Plans in Appendix A will be added to the Drought Response Actions section in Appendix A. The Metropolitan Board will continue to receive regular updates and will determine where and when to obtain supplies to replenish storage and the associated cost. The possible impact on Metropolitan's revenues and finances has been addressed in large part by allocating a portion of the reserves over target to a water management fund to be used specifically for drought response.

A-4: Financial Reserve Policy. MWD's financial reserve policy for many years was to cap reserves to ensure MWD did not retain more cash than it needs from its ratepayers – as evidenced by the use of the word, "maximum level" of reserves in all previous Appendix A Official Statements. Recently, staff self-declared that the policy was not a "cap" at all, but a "target," all without a single board meeting or directive to change the policy.

The discussion of MWD's financial reserve policy at page A-4 also creates the appearance that MWD has "planned" to manage under and over collections through its "financial reserve policy." Nothing could be further from the truth. MWD's revenue and expense projections have historically been off by hundreds of millions of dollars -- over or under. This is not the result of "drought," "climate change" any other unforeseen circumstance or financial management through MWD's "reserve" policy; it is simply the result of poor planning and estimation by MWD, and the improper use of reserves for expenditures other than maintaining stable and predictable water rates and charges. As noted above, MWD has recently changed its "budget" and rate-setting process to use sales and revenue estimates that staff knows will be exceeded in seven out of ten years. MWD has chosen to set budget and rates arbitrarily, rather than best-estimated sales and expense projections that are essential to sound business management and rate-setting. This shift and the risks of such an approach should be disclosed in Appendix A.

In order to avoid the consistent, materially incorrect shortcomings in its sales estimates used in rate setting, MWD should instead take into account its member agencies actual projected demand for MWD water, which factors in their reductions or increases in reliance on local water supplies. MWD's failure to do so presents a substantial risk of stranded costs and commensurate impact driving up water rates.

Metropolitan Response: "Target" is the terminology used in Section 5202(e) of the Administrative Code. The Code states that funds exceeding the "targeted amount" (the high reserve level calculated in accordance with Board policy) shall be used for capital expenditures and for other purposes of Metropolitan, as determined by the Board. In

April 2014 the Board determined the uses of projected reserves anticipated to be over the target at the end of this fiscal year.

Metropolitan estimates that its water sales assumptions in the budget have a seventy percent statistical likelihood of being exceeded. These conservative projections are informed by experience and were lowered from prior estimates that used a fifty percent exceedance level, after a number of years in which sales fell below budget projections and reserves were drawn down to meet the costs of service. Actual water sales have always differed from projected or budgeted estimates. In fact, over the ten-year period from fiscal year 2003/04 through 2012/13, actual sales exceeded budget in five fiscal years and were less than budget in the other five years. (See “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES—Water Sales Projections” in Appendix A.)

Water sales projections do take into account member agency demands for Metropolitan water. The information and data used for the analysis are obtained in annual surveys of member agencies through monitoring local resources projects, through coordination with water masters of groundwater basins, and from anticipated reductions due to new resources projects.

Also, please see Metropolitan’s response to “A-59, 60 *Financial reserve policy*,” particularly Metropolitan’s comments regarding Attachment 4.

A-6 Recycled Water. The description of recycled water as “not potable” is dated and should be modified. Orange County Water District already is using recycled water to recharge its groundwater basin. With today’s technology, recycled water can be treated to potable water quality.

Metropolitan Response: Thank you for this comment. The description of recycled water will be modified in Appendix A as recommended by the Finance and Insurance Committee and approved by the Board.

A-21 Sale of Water by the Imperial Irrigation District to San Diego County Water Authority. The Water Authority has objected on many past occasions to the language describing the sale of water by IID to SDCWA and transportation of that water by MWD as the payment by the Water Authority of "a lower rate" for the MWD water. This language is designed solely to support MWD's litigation arguments, and does not accurately describe the facts or terms of the Exchange Agreement. The description is misleading in that it intends to suggest to the public that MWD's water sales are higher than they really are.

Metropolitan Response: Metropolitan has consistently treated deliveries of Exchange Water as water sales since those deliveries began in 2003. In addition, the characterization of water deliveries is consistent with the terms in the Exchange Agreement. The water sales information in Appendix A discloses that water sales

revenues include revenues from water wheeling and exchanges. These revenues are classified as operating revenues accordingly.

A-29 MWD water storage capacity and water in storage. The Table that describes MWD's various storage accounts should also disclose MWD's contractual obligations to deliver water out of storage. For example, on page A-26, the Appendix A described the arrangement MWD has with Southern Nevada Water Authority whereby MWD agrees to store unused Nevada's Colorado River apportionment for SNWA's later use. The Appendix A states that through 2013, MWD has stored 160,000 acre-feet of SNWA water, which it eventually will need to pay back. That information, and any other MWD obligations and limitations on available storage supplies, including take capacity, should be disclosed clearly on the table displayed on page A-29.

Metropolitan Response: The SNWA interstate banking water is part of MWD's overall storage balances, but it is not a separate storage account. Metropolitan considers contractual obligations to return water as a demand in the year the water is anticipated to be returned. As noted in Appendix A, as part of a 2012 executed amendment, it is expected that SNWA will not request return of this water before 2022.

A-43 Capital Investment Plan. Please explain why "resource development" was deleted as an objective of the Capital Investment Plan (CIP). Also, how MWD has valued "flexibility" for purposes of rate-setting and allocation of CIP costs. These edits again appear to be litigation-driven rather than based on any facts or programmatic changes to or relative benefits of the CIP.

Metropolitan Response: This section describes the types of projects in the current CIP. The categories on this table change with changes in current CIP projects. Capital projects needed for "operational flexibility," such as the projects to deliver Colorado River water to connections that typically receive State Water Project water, are included in the CIP projects planned through 2019. Projects to meet future water demands are also included. These projects and others currently in planning are described in under the new Water Delivery System Improvements in the Capital Investment Plan Appendix to the FY 2014/15 and 2015/16 Budget posted on Metropolitan's website at <http://edmsidm.mwdh2o.com/idmweb/cache/MWD%20EDMS/003734789-1.pdf>, starting on page 177.

A-44 Pay-as-you-go funding. The Appendix A should disclose that the over-collected revenues were not the result of "improved financial operations," as stated, but rather, were the result of poorly estimated revenues and the intentional use of sales that exceed artificial estimates as described above. The Appendix A misleads the reader into believing that MWD's over-collected revenues are the result of improved financial operations, when nothing could be further from the truth. Further, the Appendix A states that, "[a]s in prior years, pay-as-you-go funding may be reduced or increased by the Board during the fiscal year," without mentioning that the board has had an established pay-as-you-go funding policy that it has failed to meet. Moreover, there has never been any board policy discussion on the merits of changing the \$95 million cap to

\$160 million. MWD's lack of disclosure on financial projections and policies is arbitrary and inherently involves great risk, which should be disclosed in the Appendix A.

Metropolitan Response: See the response to your General Comments above. We will clarify that pay-as-you-go (PAYG) funding is expected to increase based on improved financial *conditions* in FY 2013-14. These improved conditions were due to increased sales in a record dry year, the rebounding economy and other factors.

Contrary to your assertion, the increase in PAYG funding was discussed and approved by the Board during discussions for the April 2014 budget and rate actions. The policy states that it is the Board's objective to fund on a pay-as-you-go basis a portion of the capital investment plan to maintain stable rates and charges, strong financial ratios, debt capacity and appropriate reserves. The \$95 million cap, increased by the Board to \$160 million, was determined by the Board as part of the biennial budget process, and reflects Board approval of depositing \$100 million of funds over the June 30, 2014 reserve target into the R&R Fund for future capital funding.

A-46 Distribution system - prestressed concrete cylinder pipe. Please provide a copy of the estimate to reline all 100 miles of PCCP at \$2.6 billion.

Metropolitan Response: The PCCP Rehabilitation and Replacement project estimate is included in the Capital Investment Plan Appendix to the FY 2014/15 and 2015/16 Budget posted on Metropolitan's website at <http://edmsidm.mwdh2o.com/idmweb/cache/MWD%20EDMS/003734789-1.pdf>, beginning on page 147.

A-46 Administrative Code. Please add a statement that the General Counsel has opined that the Administrative Code may be waived by the Board of Directors ex post facto, without prior notice and without even knowing that they are doing so. We are aware of no other public agency that has such an unusual procedural process, which we believe materially reduces the transparency and accountability of the MWD board of directors and limits the public's - and bond investor's - ability to be advised in advance and be heard on MWD board actions.

Metropolitan Response: This comment misrepresents General Counsel Marcia Scully's statement in the General Counsel's January 10, 2014 letter (see Attachment 2). Metropolitan's Board may exercise authority granted to it by State law as long as it acts in accordance with State law. Any failure to conform to internal procedural rules that the Board adopted for its own governance would not make the Board's actions invalid. Your comment is also incorrect in suggesting that Metropolitan's Board procedures reduce "transparency and accountability" and limit "the public's—and bond investor's—ability to be advised in advance and be heard on MWD board actions." There was full compliance with the Brown Act in both the notice of the action to be taken by the Board, and the opportunity for the public to appear and be heard before the Board.

A-50 Property taxes. Please indicate that there is substantial disagreement regarding MWD's interpretation of what is "essential to the fiscal integrity of the district" and that there has been no cost-of-service study or report supporting the claim that the suspension of the tax limitation results in a "fair distribution of costs throughout MWD's service area," except for MWD's own bald assertion that is the case.

Metropolitan Response: Appendix A describes the findings of the Board in its resolution adopted June 11, 2013. This resolution was adopted by the affirmative votes of directors representing more than a majority of the votes of all the member agencies and constitutes an action of Metropolitan. The votes of a minority of directors against the resolution do not invalidate the majority approval of this resolution. Future findings, if any, regarding fiscal integrity will be within the discretion of the Board.

A-52 Water wheeling and exchanges as MWD "sales." MWD continues the highly misleading practice of reporting revenues from wheeling service as MWD water sales. Wheeling service should be reported separately from the sale of MWD water supplies. It is also highly misleading to investors to use "average" dollars per gallons per acre-foot of water sold because it impedes the ability of investors in MWD bonds to understand what alternative sources of supply are competitive with MWD water supplies and therefore may be expected to reduce MWD's future water sales.

Metropolitan Response: See the response to your comments from page A-21 of Appendix A. Average dollars per thousand gallons of water sold are shown in the last column on the table in response to questions in the past. This illustrates the cost of Metropolitan water for a volume of water that is more easily pictured by the average investor than an acre-foot.

A-53-55 Litigation Challenging Rate Structure. Although MWD characterized the Water Authority's rate cases as a challenge to MWD's "rate structure," the cases challenge the specific allocation of costs in the specific years at issue in each case. The description of the Court's ruling is incomplete in that it fails to mention that the Superior Court found that MWD's allocation of costs are not reasonable and violate the common law, California statutes and the California Constitution, including Proposition 26. The trial court has determined that MWD's rates violate all of these legal standards and requirements.

Metropolitan Response: Metropolitan's description of the allegations and the substance of the trial court ruling are accurate as drafted. We will consider adding the ruling's statement regarding violation of statutes, common law and Proposition 26 to our description, pursuant to this comment and your comment referencing pages A-62-63 of Appendix A.

A-59, 60 Financial reserve policy. Please provide a copy of the probability studies of the wet periods that affect MWD's water sales. Please provide a 10-year summary of how successful the Water Rate Stabilization Fund has been in maintaining stable and predictable water rates and

charges. MWD's financial reserve policies must be revised to comply with Proposition 26. MWD is essentially operating a giant slush fund without any cost-of-service basis for its rates and charges prior to or after collection of those rates and charges.

Metropolitan Response: The reserve policy, establishing minimum and target reserve levels, was approved by the Board in the 1999 Update to the Long Range Finance Plan. The policy utilized probability studies of wet period that affect Metropolitan's water sales. This analysis is described in Chapter Four of the 1999 Update to the Long Range Finance Plan (see Attachment 3). This policy is adopted in section 5202 of the Administrative Code.

The attached ten-year summary (see Attachment 4) shows the calculated reserve minimum, target reserve and actual reserves at the end of each fiscal year and average rate increases. In fiscal years 2009/10 and 2010/11 rate increases would have been higher if not for this use of reserves. In fiscal years 2012/13 and 2013/14 Metropolitan authorized use of reserves over target to fund capital expenditures, reduce long-term obligations and fund drought management programs. Use of reserves is incorporated in the cost-of-service analysis and rate projections.

A-62 Ten largest water customers. It is misleading to characterize wheeling/exchange water as MWD "water sales" because there is no basis in law or fact for doing so.

Metropolitan Response: See the response to your comments referencing page A-21 of Appendix A.

A-62-63 California ballot initiatives. The Appendix A fails to disclose that the Superior Court has already ruled that Proposition 26 applies to MWD for all rate years subsequent to the time the ballot measure was passed in November 2010, i.e., MWD is subject to Proposition 26 going forward. MWD has not established rates and charges that comply with Proposition 26 and will have the burden in court in future years to prove that it has done so. This presents a substantial risk of ongoing and continued litigation unless and until MWD changes its cost-of-service and rate-setting practices.

Metropolitan Response: This section refers to "Litigation Challenging Rate Structure," which describes SDCWA's allegations under Proposition 26 and the trial court's decision. The trial court's ruling that Proposition 26 applies to Metropolitan's rates effective in 2013 and 2014 is subject to appeal and has no precedential value.

A-81 BDCP costs. Please confirm what BDCP costs have been included on the Table at page 81.

Metropolitan Response: Footnote 4 will be corrected to read, "(4) Annual totals include BDCP related costs for the fiscal years ended June 30, 2014 through June 30, 2018, of \$7.2 million in fiscal years 2013/14, \$-0- in each of fiscal years 2014/15 and 2015/16, \$15 million in 2016/17 and \$24 million in 2017/18." 2013/14 costs are for DHCCP

related planning costs that Metropolitan has classified as capital related costs. Projected BDCP costs for 2016/17 and 2017/18 are reflected in the ten-year financial forecast provided in the biennial budget for fiscal years 2014/15 and 2015/16 that was approved by Metropolitan's Board on April 8, 2014.

A-84 Historical and projected revenues and expenses. MWD's projected revenues and expenses have been arbitrarily established. No member of the public or investor could know what MWD's projected revenues and expenses will be, given the arbitrary manner in which MWD has established its budget and rates as described above. Further, MWD has a poor record of projecting future rate increases; its rates have more than doubled over the past ten years, which is materially more than projected by MWD. Its future rate projections -- which include investments that may be made in the BDCP -- will supposedly result in rate increases lower not higher than in the past. This is not logical or based on any credible cost analysis or rate projections.

Metropolitan Response: See responses above.

Thank you for your comments on Metropolitan's Official Statement. We have carefully reviewed and considered them and circulated them to our bond counsel team, financial advisor, and underwriters. Appendix A will be revised to address certain comments as described in this letter.

Sincerely,



Gary Breaux
Assistant General Manager/Chief Financial Officer

cc: J. Kightlinger
MWD Board Members
SDCWA Board of Directors and Member Agencies

Attachment 1—Appendix A draft dated April 30, 2014, showing changes from the November 25, 2013 draft

Attachment 2—Letter from General Counsel dated January 10, 2014

Attachment 3—Long Range Finance Plan, 1999 Update, Chapter 4 Fund Policies

Attachment 4—Ten-year summary of reserve minimum, target and actual reserves and average rate increases



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

December 13, 2013

Director Michael T. Hogan
Director Keith Lewinger
Director Vincent Mudd
Director Fern Steiner
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated December 9, 2013 regarding Board Letter 8-1

This letter responds to your comments on Draft Appendix A dated November 25, 2013 of the Official Statement for Metropolitan's Water Revenue Refunding Bonds, 2011 Series A-1/A-3 and 2009 Series A-2, attached to Board Letter 8-1. Chairman Foley asked me to respond to your letter.

General Comments

Your "General Comments" find inconsistent statements between the Official Statement (in this case, the draft Remarketing Statement presented to the Board for review and authorization to finalize, execute and distribute) and court pleadings in the Water Authority's challenge of Metropolitan's rates. The documents are readily reconciled. Metropolitan's offering statements are limited to information about the bonds being offered and their security and source of payment to potential investors. As you know, Metropolitan's pleadings respond to the Water Authority's allegations and legal claims irrespective of the allegations' and claims' materiality to the bonds, their security or their repayment. Given the difference in context and purpose, one would not expect the documents to be mirror images of one another. The statements in each, however, are made in good faith and Metropolitan stands behind them.

The example from page A-54¹, disclosure that you have questioned before, states Metropolitan's expectation that rates and charges would still recover Metropolitan's cost of service if changes are required in response to court rulings. Although the components of the rate structure may change, the rates still will be set to recover anticipated costs of service and meet the revenue requirement. The Board could adjust Metropolitan's costs as well and set rates to recover reduced costs of service. Aggregate revenues still will be set to recover anticipated costs of service, a requirement that would not be affected. We will clarify this statement in Appendix A.

The destabilizing effect of the rate litigation on planning and individual projects from uncertainty about rate structure components exists because any court ruling related to Metropolitan's rates could require reconsideration and modification of rate components and costs. As correctly stated in paragraph 30 of Mr. Upadhyay's declaration that you provided as Attachment 1 to your comment letter, "Even if MWD's overall revenues would not be affected by a challenge to MWD's Existing Rate Structure, that does not mean that a challenge to MWD's Existing Rate Structure would not affect the revenues allocated to any particular program or service . . ." Statements in Metropolitan's court pleadings that recognize this are factual and do not need to be reconciled with the Appendix A statement about Metropolitan's aggregate revenues.

You also generally criticize Metropolitan's financial policies, such as adoption of approaches other than the take-or-pay contracts advocated by the Water Authority. The Board-established financial policies are reviewed periodically and will be reviewed again as the next biennial budget is presented to the Board for consideration, beginning in January. Take-or-pay contracts are one alternative but not the one chosen by the Board in Metropolitan's current rate structure, and not the only means by which member agencies may commit to pay for Metropolitan's programs. The unfounded statement in your letter, that Metropolitan and its member agencies are going to "extraordinary lengths" to impede development of local water supplies in San Diego, disregards the cooperative efforts by Metropolitan and its member agencies to encourage local supply development within the region and ignores Metropolitan's documented support for the Carlsbad seawater desalination project.

Comments on Draft Appendix A dated November 25, 2013

A-1 Uniform rates for each of class of service. Appendix A states that, "member agencies request water from Metropolitan...and pay for such water at uniform rates established by the Board for each class of service" (emphasis added). This is the only place in Appendix A where the words, "class of service" are used. Please confirm whether the water "categories" described at A-57-58 are the "classes of service" referred to in the recital at page A-1.

¹ References to page numbers are to the marked November 25, 2013 draft, showing changes from the May 31 draft.

Yes, Page A-52 of the blackline states: “Metropolitan has provided three classes of water service: (1) full service; (2) replenishment (discontinued effective December 31, 2012); and (3) interim agricultural (discontinued effective December 31, 2012). See “—Classes of Water Service” below.”

A-6 Standby or “dry-year peaking” demands of MWD member agencies. Due to the compartmentalization of the disclosures in Appendix A, the reader might fail to associate the withdrawals from storage described in the last paragraph on page A-6 with the Water Authority’s rate litigation; specifically, the issue of MWD’s failure to account for or properly allocate the costs associated with having almost 6 million acre-feet of storage capacity and more than 3.3 million acre-feet of stored water available for withdrawal, which made possible the 300,000-500,000 acre-feet of water supply that MWD expects to draw upon to meet demands in 2013. The long-term negative impacts on MWD from its failure to identify and account for these costs are described in the Blue Ribbon Task Force Report, in the above excerpts and other portions of the Report. Appendix A should be revised to include a full discussion of this issue including potential impacts on MWD sales and rates.

The withdrawals from storage described on A-6 disclose how Metropolitan is meeting member agency demands for supplemental water supplies in 2013, under a 35% State Water Project allocation. This disclosure references the table of water storage capacity and water in storage because these withdrawals will impact the amount of water in storage as of January 1, 2014. It is not associated with the Water Authority’s rate litigation.

A-11 Area of Origin litigation. Please provide us with a copy of the settlement agreement that is “currently being circulated among the parties for signature.”

Attached. There are four settlement agreements, a separate one with each of the four plaintiffs. Appendix A will refer to settlement agreements rather than a single settlement agreement.

A-18 Second supplemental agreement with Coachella. Please provide a copy of the second supplemental agreement with CVWD referred to in the second full paragraph.

Attached.

A-28 Storage capacity and water in storage. What accounts for the reduction in the storage numbers since last reported in May 2013?

Unlike replenishment and withdrawal of water stored in a Metropolitan facility like Diamond Valley Lake, where changes may be calculated immediately, water storage in

non-Metropolitan facilities and accounts may be reconciled throughout the year. Reconciliations resulted in these adjustments.

A-30 Preferential rights and water supply allocation plan. The second full paragraph under Water Supply Allocation Plan should be revised to include disclosure that – except in a water shortage emergency declared by the MWD board under Section 350 of the Water Code (which has never happened), or any other statutory basis MWD may believe would support limitations on the exercise of preferential rights – the MWD board has no statutory authority or ability whatsoever to diminish the statutory preferential right to water held by each of its member agencies. It is highly misleading in the context of current water rates and realities to state that, “historically, these rights have not been used in allocating Metropolitan’s water.” The historical record is clear that the cities of Los Angeles and Long Beach have every intention of calling upon their respective preferential rights to water should it be advantageous for them to do so. The Water Authority does not question these rights, which have also been confirmed by legal opinions of MWD’s General Counsel and the Court of Appeal.

The statement that you question is a correct statement. To date, preferential rights have not been used in allocating Metropolitan’s water. The preferential rights disclosure is included because the statutory right exists and any member agency might exercise its preferential right to purchase water in the future.

A-32 Impact on MWD sales of Los Angeles updates reported in Appendix A. Two significant changes are made to Appendix A regarding the City of Los Angeles. First, that its “favored son” agreement executed by Ron Gastelum without the knowledge or consent of the board of directors, is expected to be completed six years sooner than previously disclosed. Second, that LADWP has reached a “major agreement” regarding future dust control on portions of Owens Lake. Please explain what has changed in the implementation of the AVEK agreement that accounts for the project now being completed before the end of next year (versus 2020 as previously reported in Appendix A). Please explain the impacts on MWD water sales as a result of each of these developments.

This section was updated in consultation with Department of Water and Power staff. Appendix A describes the Los Angeles Aqueduct and local supply sources because these sources of local water affect member agency demands for supplemental supplies from Metropolitan. This section gives DWP staff’s projections of the City’s purchases from Metropolitan under a range of conditions over the next 25 years. Impacts of these developments already are factored into the demand projections.

A-33 Local water supplies. The discussion of local water supplies generally is very confusing because it does not make clear to the reader what supplies are being developed by MWD (or with subsidies from MWD) and which are not. There should also be a discussion here that ties in to

later sections of the Appendix A disclosing the impact on MWD sales from the development of local water supplies by the member agencies (with and without subsidies from MWD).

Sources of local water affect member agency demands for supplemental supplies from Metropolitan, whether the supplies are developed by member agencies or other agencies, with or without funding from Metropolitan. Appendix A describes the factors included in Metropolitan's water sales projections under "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES—Water Sales Projections."

A-34 Impact on MWD sales of Carlsbad seawater desalination project. We were unable to confirm whether MWD's future sales projections take into account the 48,000-56,000 acre feet of water supply expected to come on line in 2016. Please identify where that accounting is made.

It is assumed in our projections that SDCWA will only purchase the minimum required under its purchase contract for water from the Carlsbad project. The 48,000 acre feet projected to be purchased by SDCWA from the Carlsbad project represents less than 3% of projected water sales of 1.75MAF in FY 2016-17 and is taken into account. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES—Water Sales Projections" in Appendix A.

A-35 MWDOC application for MWD subsidies for a seawater desalination project. Please provide us with a copy of the application. Also, please provide an analysis (facts) of the regional benefits MWD believes would support the payment of such subsidies.

This application will be analyzed using the Local Resources Program criteria after this proposed project is fully permitted, consistent with other applications for funding under the Local Resources Program. It will be submitted for Board consideration if it receives necessary permits and passes full staff review. We are providing a copy of the application to you separately. The application was submitted jointly by MWDOC and the Cities of Anaheim, Fullerton, and Santa Ana on October 3, 2013. We will revise Appendix A to state that this is a joint application from these member agencies.

A-42 Discussion of MWD's capital investment plan (CIP) illustrates the need for a long range finance plan and updated cost of service analysis. The short CIP discussion reflects the wild fluctuations as a result of poor estimations by MWD staff of capital spending and the need for pay-as-you-go funding and water rate increases. Every one of these highly inaccurate estimations results in further distortion of MWD's already improper allocation of costs to its member agencies and all MWD ratepayers. It is also unclear – except possibly for litigation purposes – why MWD is claiming that it will spend zero dollars on "supply" over the next five years. Please advise whether the words, "Cost of Service," are used in a rate setting context or, is intended to have some other meaning in this section of the Appendix A. Also, please advise why debt service

for bonds MWD did not issue and does not expect to issue is included in the financial projections.

As stated in this section, the CIP is reviewed and revised periodically and the CIP estimate is updated annually based on the factors listed in this section. Projects can be delayed, redesigned or deferred. Actual expenditures are less than projections because of lower-than-estimated bids, lower progress payments and efforts to optimize project design and scheduling, resulting in significant savings. In contrast, the cost of service study and debt service projections are updated in each budget process. The biennial budget proposal will include an updated cost of service study and revised debt service projections.

A-49 Risk management discussion is incomplete. As stated in multiple prior letters, we remain concerned with the inadequacy of MWD's overall risk disclosure. Many of the issues we have raised have not been addressed in the Appendix A. In particular, we remain concerned that MWD's long range finance plan is materially out of date (last updated in 2004). The draft Appendix A does not disclose that MWD is operating (by choice) without a long range finance plan because, after more than five years of working on it, MWD abandoned the effort (i.e., its member agencies could not agree on a long range finance plan to pay MWD's costs). Nor does MWD (by choice) have water rate projections that take into account and plan for all of MWD's projected costs and liabilities. These costs include, for example, some reasonable estimate of BDCP costs, other water supply programs included in the IRP, facility investments and retiree health. Almost 20-years has passed since the Blue Ribbon Task Force wisely cautioned MWD to develop and implement a plan for its fiscal sustainability; yet today, there remains ***no plan*** for how MWD expects to pay its costs over the long term. MWD's current ad hoc approach to financial planning is neither advisable nor sustainable and its continued spending creates a risk for all of Southern California including all of its bondholders.

This comment is inconsistent with other comments in this letter; see your immediately prior and following comments. Also see the "Risk Factors" discussion in the body of the Remarketing Statement.

Metropolitan's upcoming biennial budget will review financial policies and include a ten-year forecast, rather than the five-year forecast in prior budgets. This long-range forecast will be reviewed every two years as part of each biennial budget, compared to the less-frequent Long-Range Finance Plan updates. This will assure more frequent examination of long-range financial planning.

A-50 MWD's actions in 2013 suspending the tax limitations in the MWD Act were not factually or legally justified. It is ironic that MWD chose to increase taxes (the net economic effect of suspending the limitation) at the same time that it was awash in cash from the over-collection of revenue from Southern California's water ratepayers. In June 2013, when MWD took the action

to suspend the tax limitations, it had already collected \$314 million more than needed to pay 100% of its budgeted expenditures and caused its reserves to exceed maximum reserve level by at least \$75 million (see the Water Authority's June 5, 2013 letter RE Board Memos 8-1 and 8-2). As a matter of fact, additional tax revenue was most assuredly *not* "essential to the fiscal integrity of the district." The MWD board did not and could not make the findings necessary to support the suspension of the tax limitation, and any suggestion that the board considered in any meaningful or substantive way "factors" including the "balancing of proper mechanisms" for funding current and future State Water Project costs is unsupported by the record. If there is any document or record you believe supports this statement in the Appendix A other than the board memo, please provide copies to us in your response to this letter.

The Board's determination to suspend the tax limitation clause of the MWD Act balanced a number of factors, including long-range views of State Water Contract obligations, proper mechanisms for funding them, a balance of revenue sources and a fair distribution of costs across Metropolitan's service area, rather than a short-term view of currently-available revenues. The tax rate set by the Board in August maintained the same tax rate as in the prior fiscal year.

A-51 Wheeling revenues as an MWD "water sale." The Water Authority does not purchase its IID or canal lining water from MWD; it pays MWD to convey the water to San Diego. MWD's representation of these revenues as "water sales" are made for purposes of litigation only and are misleading bondholders, MWD's "disclosures" in the footnotes to its Summary of Receipts by Source notwithstanding.

Metropolitan consistently lists revenues from its volumetric water rate components as water sales in its Summary of Receipts by Source table, and has done so since inception of the Exchange Agreement in 2003. This is consistent with the master resolution for Metropolitan's water revenue bonds, which pledges all water rate revenues to repay the water revenue bonds. Further, the Exchange Agreement is not a wheeling agreement or a conveyance agreement. In order to provide complete disclosure, footnote 2 points out that water wheeling and exchange revenues are included in the "Water Sales" category in the table and refers to the section where wheeling and exchange revenues are separately quantified.

A-52 Member agency purchase orders. The description of member agency purchase orders is misleading because it suggests that MWD's member agencies have made firm commitments to purchase water from MWD in the future when they have not. See discussion of this issue in prior letters commenting on the Appendix A.

See responses dated May 22, 2013, February 19, 2013 and November 19, 2012 to the Water Authority's prior letters.

A-53 Rate structure. Representations that uniform rates are collected “for every acre-foot of water conveyed by Metropolitan” are inaccurate because the rates do not take into account all of the discounted and special agreements MWD affords some but not all of its member agencies. Moreover, MWD fails to comply with cost of service legal requirements and its own act because it fails to properly acknowledge or account for different classes of service it provides to its member agencies (see comment at A-1 above, the only place in the Appendix A in which MWD mentions classes of service).

See response to comment at A-1 above. As noted, interim agricultural water service and replenishment service have been discontinued. We believe that the remainder of this comment is factually and legally unsupported.

A-54 Litigation challenging rate structure. See general comments about the inconsistency between representations in the draft Appendix A and representations made to the Court.

See our response to your general comments.

A-60 Hydroelectric power recovery revenues. Why have the three paragraphs been deleted?

The initial paragraph in this section provides energy generation sales revenues from the 16 small hydroelectric plants on Metropolitan’s distribution system for the past two fiscal years and the range of annual revenues from these energy generation sales since 2000. The deleted paragraphs provided additional detail about the underlying sales contracts, which the team determined to be immaterial to an investor making an investment decision.

A-79 Tax increase to pay for additional payments under the State Water Contract. Please provide a copy of the opinion of MWD’s General Counsel referred to in the first full paragraph that the tax increase as described would be within the exemption permitted under Article XIII A of the State Constitution as a tax to pay pre-1978 voter approved indebtedness.

In *Goodman v. Riverside* (1983) 140 Cal.App.3d 900, 909-10, the court held that when California voters approved the Burns-Porter Act, they approved indebtedness in the amount necessary to build, operate, maintain and replace the State Water Project and they approved the use of local property taxes to fund water contract obligations of the water contractors (such as Metropolitan). General Counsel Robert P. Will explained in March 1980, when the Board authorized Metropolitan’s intervention as a defendant in *Goodman*, that “in order to preserve the financial integrity of the Project and to provide for its essential further development, it is of utmost importance that the taxing power of the contractors” to pay their state water contract obligations be maintained. Beginning with General Counsel Will and his successor Carl Boronkay, who represented Metropolitan as one of the intervenors in the *Goodman* case, General Counsel and their

staff attorneys have confirmed the continuing vitality of the analysis and holdings in *Goodman*.

A-86 Projected revenues and expenditures. See question above, at A-34. Do these revenue projections assume that the Carlsbad seawater desalination facility comes on line in 2016? See also the questions above, at A-32. What assumptions are made about water sales to LADWP?

See answer to A-34. The projected sales of 1.75MAF assume a normal year in terms of supply hydrology for Metropolitan and its member agencies and are conservative when compared to the long-term average water sales of 2.0MAF and the recent five-year average sales of 1.815MAF.

A-89 Long range finance plan. MWD's reserve policies are outdated, just as its 1999 Long-Range Finance Plan is. Is MWD staff relying upon and implementing all of the policies in the 1999 plan at this time?

See response to your comment on A-42.

We have carefully reviewed and considered your comments on Metropolitan's Official Statements and Remarketing Statements. Our objective in the Offering Statements is to provide complete and accurate disclosure regarding the bonds being offered and their security and source of payment to potential investors. We are confident that our responses to your comments meet that objective and we thank you for your comments.

Sincerely,



Gary Breaux
Assistant General Manager/Chief Financial Officer

cc: J. Kightlinger
MWD Board Members
SDCWA Board of Directors and Member Agencies

Attachment 1—Appendix A draft dated November 25, 2013, showing changes from the May 31, 2013 draft

Attachment 2A, 2B, 2C, 2D—Settlement Agreements for: A) Napa County Flood Control and Water Conservation District; B) Solano County Water Agency; C) City of Yuba City; and D) Butte County

Attachment 3—Second Supplemental Agreement between Metropolitan and Coachella Valley Water District, dated June 14, 3013





THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

June 18, 2013

Director Keith Lewinger
Director Vincent Mudd
Director Fern Steiner
San Diego County Water Authority
4766 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated June 7, 2013, regarding Board Memo 8-5

This letter responds to your letter to Chairman Foley and Members of the Board dated June 7, 2013, providing comments on the May 31, 2013, draft of Appendix A to the Official Statement for Metropolitan's Special Variable Rate Water Revenue Refunding Bonds, 2013 Series E, attached to board letter 8-5. It also responds to your additional questions on investments and swap policy. These were addressed in my letter of May 22, responding to your May 13 comments on the draft Official Statement for Metropolitan's Water Revenue Refunding Bonds, 2013 Series D. Chairman Foley asked me to respond to your letter.

Investment Policy. Your June 7 letter again requests a detailed report on the swap policy and investment policy, focusing on risk. Metropolitan's Statement of Investment Policy for the coming fiscal year was unanimously approved by the Finance and Insurance Committee on June 10 and the Board on June 11. The Statement of Investment Policy approved last week renews the prior year's policy (including its priorities of safety, then liquidity, then investment return) with only one change: It adds restrictions on the use of reverse repurchase agreements.

A detailed report on the swap policy will be presented in July, when the next quarterly swap report will be available, as promised in my May 22 letter and reported at the June 10 Finance and Insurance Committee meeting. This presentation will address your concerns expressed in your letter.

Interest-bearing account. Your letter requests account information for the interest-bearing account that holds the disputed amount under the Exchange Agreement. The aggregate disputed amount allocated to this account as of May 31, 2013 is \$83,276,848. Interest earnings from inception of the account in January 2011 through May 31 is \$1,087,137.17 and the account balance at May 31 is \$84,363,985.17.

SDCWA Directors

June 18, 2013

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Your most recent comments on Appendix A and our responses are set forth below.

Frequency of editorial changes to the Official Statement. In general, we are concerned with the frequency of editorial changes being made to the Official Statement that do not reflect updates to describe material events that have occurred since the last distribution of the Official Statement.

We continually strive to clarify the disclosure in the Official Statement. Many changes, editorial and otherwise, are the product of comments from outside professionals on the financing team, which bring fresh eyes to each financing, as well as Finance and Legal staff and board members.

A-30: Level of water sales estimated by MWD. The redline deletes the following sentence:

The level of water sales estimated in Metropolitan's adopted biennial budget and revenue requirements for fiscal years 2012-13 and 2013-14 reflect local supplies from the Los Angeles Aqueduct system and other systems at higher than normal levels based on hydrologic conditions that occurred in 2010 and 2011.

Why is this statement being deleted, given that there cannot possibly have been a change in the level of water sales estimated in the biennial budget?

Describing hydrologic conditions in 2010 and 2011 had become stale and was unnecessary.

A-32 Conjunctive Use. As in the case of past edits to the Official Statement relating to the Replenishment Service Program, the edits to the first full paragraph change the prior statement describing objectives to statements of fact about the purported benefits of discounted water sales. We have stated many prior objections and provided extensive comments on the inaccurate and unsupported characterizations of purported benefits from MWD's sale of discounted water.

These edits provided the termination date of the Replenishment Service Program. Because the program has ended, the program description changed from present tense to past tense.

A-32 Seawater Desalination. We have commented previously that MWD's description of Regional Water Resources and Local Water Supplies is generally misleading, because it is written in a manner that suggests MWD is, or must somehow be involved in local projects, through the payment of subsidies or otherwise. As requested in past correspondence, we believe that the Official Statement should be corrected to include discussion about the local water supply development plans that all of the member agencies have, not just the City of

SDCWA Directors

June 18, 2013

Page 3

Los Angeles. See, for example, our letter dated November 5, 2012 at page 3, *Discrepancy for standard of reporting local water supply development*.

Given that the MWD Seawater Desalination Program incentive agreement referenced in the statement was not signed, we suggest that the last paragraph on page A-32 be edited to read as follows:

In November 2012, SDCWA approved a water purchase agreement with Poseidon Resources LLC (Poseidon) for a seawater desalination project in Carlsbad (the “Carlsbad Project”) for a minimum of 48,000 acre-feet and a maximum of 56,000 acre-feet per year. The Carlsbad Project is under construction and is anticipated to be completed in 2016.

The rest of the paragraph is not relevant; what the investor needs to know is that MWD sales will be reduced by the Carlsbad Project.

The intent of the entire “REGIONAL WATER RESOURCES” section is to describe sources of water, other than supplemental supplies from Metropolitan, that are available to water users in our service area. We will remove information about the now-superseded desalination program agreement for the Carlsbad project.

A-45: MWD Revenues – ad valorem property taxes. We recommend you delete the last sentence because it does not accurately reflect the legislative history of the statutory limitation on MWD’s authority to levy ad valorem property taxes.

The legislative history of section 124.5 of the MWD Act shows that the Legislature gave a majority of Metropolitan’s Board the discretion to determine whether to suspend the tax rate limit. The sentence describes factors to be considered by the Board. This paragraph will be updated to reflect the Board action last Tuesday.

A-58: Investment of moneys in funds and accounts. What changes have occurred since the last Official Statement in May requiring MWD to add the disclosure that, “the market value of Metropolitan’s investment portfolio is subject to market fluctuation and volatility and general economic conditions?”

This sentence merely was moved from the body of the Official Statement to Appendix A.

SDCWA Directors

June 18, 2013

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A-79: Financial projections that take into account actual results of operations and assumed water sales. The following text, which describes the basis of the projected revenues and expenditures, is deleted:

The projected financial information relating to fiscal year 2012-13 in the following table is based on a financial projection as of December 31, 2012 which takes into consideration actual results of operations through December 31, 2012, projections for the period of January through June 2013 and assumes sales of 1.74 million acre-feet. Based on actual results of operations through March 31, 2013 and projections for the period of April through June 2013, Metropolitan now projects for fiscal year 2012-13 that water sales will increase to 1.81 million acre-feet, Parity Bonds Debt Service Coverage will be 2.24, Debt Service Coverage on all Obligations will be 2.23, and Fixed Charge Coverage will be 1.70.

Footnote (a) now states:

Projected revenues and expenditures are based on assumptions and estimates used in the adopted 2012-13 and 2013-14 biennial budget and reflect the projected issuance of additional bonds. Projected revenues and expenditures for fiscal year 2012-13 include actual financial results for July 2012-March 2013 with revised projections for the balance of the fiscal year.

What necessitated this change in the description of the basis of MWD's statement of historical and projected revenues and expenditures? Or, please confirm if no change in the process has been made or is intended to be described.

The paragraph quoted above introduced a table of historical and projected revenues and expenditures that showed financial information based on projections that took into account actual results through December 31, 2012. The lead-in paragraph provides additional projections based on actual results through March 31, 2013. The March 31 projections were incorporated in the table contained in the May 31 Official Statement draft, as explained in footnote (a), making it unnecessary to include these same projections in the introductory paragraph.

A-82: Cost of service. MWD should disclose that it does not believe that statutory and constitutional requirements limiting how much a utility may charge for its services apply to MWD. This could be done by adding the following sentence at the end of the second full paragraph:

Metropolitan contends that this is the sole legal requirement affecting the setting of its rates and charges and that cost-of-service industry standards and legal limitations,

SDCWA Directors

June 18, 2013


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including but not limited to Proposition 26, do not apply to Metropolitan. See “METROPOLITAN REVENUES—Litigation Challenging Rate Structure” in this Appendix A.

We decline your suggestion to revise the reference to cost of service on page A-82. First, your proposed language is inapt in that the paragraph that you seek to revise discusses near-term historical and projected financial performance, whereas your language purports to address generally Metropolitan’s cost-of-service approach to rates and charges and the litigation. Second, even if the discussion were apt, it is unnecessary. The Official Statement already informs investors regarding Metropolitan’s cost-of-service approach to rates and charges, as well as the principles underlying that approach and Metropolitan’s understanding that the approach is lawful. (See “METROPOLITAN REVENUES—Rate Structure” and “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES.”) And, as you acknowledge, it already includes a substantial discussion of the litigation and an assessment of its possible effects on rates, charges and revenues. (See “METROPOLITAN REVENUES—Litigation Challenging Rate Structure.”) It is quite clear to investors that Metropolitan and SDCWA disagree on the relevant law. Third, and perhaps most important, your proposed language is inappropriate because it would mislead, not inform, investors. The proposed language mischaracterizes the record in the litigation and misstates Metropolitan’s cost-of-service approach.

We appreciate your careful review of the Official Statement.

Sincerely,



Gary Breaux
Assistant General Manager/Chief Financial Officer

cc: J. Kightlinger
M. Scully
MWD Board of Directors
SDCWA Board of Directors and Member Agencies



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

May 22, 2013

Director Keith Lewinger
Director Vincent Mudd
Director Fern Steiner
Director Doug Wilson
San Diego County Water Authority
4766 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated May 13, 2013, regarding board letter 8-3

This letter responds to your questions and comments to the May 1, 2013, draft of Appendix A to the Official Statement for Metropolitan's Water Revenue Refunding Bonds, 2013 Series D, attached to board letter 8-3. Chairman Foley asked me to respond to your letter.

Before we address your specific comments on the May 1 draft of Appendix A, there seems to be some confusion in the central policy question you identified (whether the Board should change its investment policy to be more conservative and consistent with the primary objective of safeguarding the principal of invested funds), and Metropolitan's interest rate swap policy. Nothing in the swap portfolio affects the investment policy.

The Board considers Metropolitan's Statement of Investment Policy annually and unanimously approved the current Statement of Investment Policy on June 12, 2012. As explained in board letter 8-1 for the June 2012 meeting and in the policy itself, safety of funds is the highest of the three priorities governing public funds management. To safeguard invested funds, each investment is entered into considering the quality of the issuer, the underlying security or collateral, and diversification of the portfolio. After safety, the second and third priorities are liquidity and investment return.

The Statement of Investment Policy does not apply to interest rate swaps, which are governed by the Master Swap Policy. The Master Swap Policy was most recently amended by unanimous vote of the Board on May 11, 2010. The Board also authorized the novation of existing swaps with UBS AG to a higher-rated counterparty and amendment of swaps to permit early cancellation under the criteria presented to the Board. Since then, Metropolitan successfully novated the UBS AG swaps to Deutsche Bank and has amended and terminated \$322.2 million in interest rate swaps, achieving

SDCWA Directors

May 22, 2013

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\$1.2 million in debt service savings from the swap terminations and associated refunding of water revenue bonds. A similar swap termination and refunding transaction, described in the Official Statement that was the subject of your February 11, 2013 comment letter, is pending favorable market conditions.

The agenda for the April 2013 meeting of the Finance and Insurance Committee included a review of the swap policy and current swap transactions, as requested by Director Lewinger. The presentation was deferred for lack of time at that meeting. An updated report will be presented in July, when Director Lewinger can be present and the next quarterly swaps report will be available. I can meet with you to discuss your concerns and answer your questions before that presentation, if you prefer. In the meantime, you may view the PowerPoint posted for the Finance and Insurance April committee meeting in the Board letter archive at <http://edmsidm.mwdh2o.com/idmweb/cache/MWD%20EDMS/003733006-1.pdf>.

Your most recent comments on Appendix A and our responses are set forth below.

A-49: Source of funding to pay SDCWA to the extent it prevails in the litigation. The points raised in our February 11, 2013 letter to you on this subject have not been addressed (see page 4, A-50). The Exchange Agreement requires MWD to hold the amount of disputed funds in a separate interest-bearing account, not as part of MWD's financial reserves. Moreover, the use of financial reserves for this purpose is improper to the extent that the reserves are being funded by SDCWA. Any amounts that may be due to the Water Authority from the litigation must be paid by the other member agencies, not by the Water Authority itself. MWD is in breach of the Exchange Agreement provision requiring it to deposit the disputed funds in a separate interest bearing account.

The amounts that are in dispute are being set aside in a separate account and interest is being credited on a monthly basis at the effective yield earned during the month on Metropolitan's investment portfolio, as described in the letter dated February 24, 2011 from Karen Tachiki, Metropolitan's General Counsel, to Daniel Hentschke, SDCWA General Counsel, and my October 15, 2012 letter to Tracy McCraner, SDCWA Director of Finance/Treasurer. These amounts are derived from available water revenues. Metropolitan's uniform rates to all member agencies for like classes of service mean that water revenues from all member agencies, including SDCWA, are paying toward this potential cost of service. Any amounts that may be due to SDCWA as an award in the litigation would be paid as ordered by the Court.

A-50: Member Agency Purchase Orders. The description of Member Agency Purchase Orders is misleading. We attach and incorporate by reference our letter to you dated October 8, 2012 stating objections to both the form and substance of MWD's "Amended and Restated Purchase Order." Like all other public agencies, MWD is required to align its costs with the services it provides; the creation of a "purchase order" and characterization of it as a "voluntary" agreement will not immunize MWD from the application of Proposition 26.

SDCWA Directors

May 22, 2013

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As we responded on November 19, 2012, in response to the comment on purchase orders in your comment letter dated November 5, 2012, the existing description accurately summarizes the current terms of the purchase orders. Metropolitan sets rates to recover anticipated costs of service. The purchase orders determine the amount of water a member agency can buy at the lower Tier 1 rate and provide a Tier 2 price signal. The purchase orders do not affect the cost of service. Metropolitan believes that the purchase orders conform to the requirements of California law.

A-51: Replenishment. The discussion of replenishment remains misleading because it fails to disclose material concerns with this discounted water program as described in our past letters to the board (including but not limited to those dated April 25, May 6, September 12, November 4 and December 12, 2011). The last time MWD authorized the sale of water at a discount, it said that the member agencies would not purchase water at the full service price due to “budgetary and fiscal constraints.” MWD should disclose the relationship between discounted water sales (under any guise or program) and loss of full service sales, impacts on water rates and cost of service legal requirements.

The Replenishment Service Program was eliminated on December 11, 2012, as disclosed in the existing text. Since then, member agencies have been purchasing water for replenishment at full service rates. Speculation about hypothetical loss of full service sales and rate impacts due to past replenishment sales would be inappropriate and potentially misleading.

5/14/2013 Board Memo 8-1 – Set public hearing to consider suspending Section 124.5 of the Metropolitan Water District Act to maintain the current ad valorem tax rate. MWD should certainly disclose in Appendix A that it believes that the fiscal integrity of the District is currently threatened. This is a material fact that investors need to be informed of.

The Board’s action on May 14, 2013, to set a hearing and consider suspending this clause of the MWD Act has been added to Appendix A. Describing this action before a vote by the Board would have been premature. This action does not mean that Metropolitan’s fiscal integrity is currently threatened, as you allege. Rather, the Board will consider whether maintaining ad valorem taxes at current rates will maintain rate stability and a sound fiscal structure.

Your letter also alleges that Metropolitan does not have a long range finance plan and takes an ad hoc approach to financial planning. The current biennial budget includes a five-year forecast that covers anticipated costs, including funding for necessary capital refurbishments and replacements, pension liabilities and other post-employment benefits. Under the five-year plan, Metropolitan will be funding its other post-employment benefit obligations at the actuarially-required contribution annually by 2017. The five-year forecast is based on a conservative water sales estimate and projects annual rate increases of 3% in the last three years of the forecast. The five-year forecast will be updated with the next biennial budget and may be extended to a ten-year forecast. Still, it is unclear that longer forecasting would reduce risk. Instead, projections with a longer horizon become more speculative.


SDCWA Directors

May 22, 2013

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Review by board members is an important part of the process to make sure that Appendix A does not contain any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in light of the circumstances in which they were made, not misleading, and meets or exceeds disclosure standards. Comments from board members, finance, and legal staff and outside professionals on the financing team are discussed by the team and carefully evaluated, often resulting in clarifications or corrections to Appendix A. Other comments are not incorporated, for the reasons explained in our response letters. We appreciate your careful review of the Official Statement.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Breaux". The signature is fluid and cursive, with a prominent initial "G" and "B".

Gary Breaux

Assistant General Manager/Chief Financial Officer

cc: J. Kightlinger
M. Scully
MWD Board of Directors
SDCWA Board of Directors and Member Agencies



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

February 19, 2013

Director Vincent Mudd
Director Keith Lewinger
Director Fern Steiner
Director Doug Wilson
San Diego County Water Authority
4766 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated February 11, 2013, regarding Board Letter 8-1

This letter responds to your questions and comments to the January 30, 2013 draft of Appendix A to the Official Statements for Metropolitan's Water Revenue Refunding Bonds, 2013 Series A and B and 2013 Series C, attached to Board Letter 8-1. Chairman Foley asked me to respond to your letter.

Answers to your questions about Metropolitan's interest rate swaps and the proposed swap terminations, to the extent not fully addressed in the Finance and Insurance Committee discussion of this item on February 11, are in Metropolitan's quarterly swap reports. The January 2013 report, for the quarter ended December 31, 2012, is posted at <http://edmsidm.mwdh2o.com/idmweb/cache/MWD%20EDMS/003725136-1.pdf>. We plan to provide a report at the April Finance and Insurance Committee meeting, when the next quarterly report will be available.

You also requested a report on Metropolitan's investment policies. The Statement of Investment Policy must be updated and presented for Board approval annually, by law and pursuant to the Administrative Code. See Board Letter 8-1 approved on June 12, 2012. As explained in the Statement of Investment Policy, the California Government Code restricts the types and credit quality of investments that Metropolitan and other California local agencies may enter into. Metropolitan's investment criteria are in fact more restrictive than Government Code requirements. The current Statement of Investment Policy is posted at <http://edmsidm.mwdh2o.com/idmweb/cache/MWD%20EDMS/003722374-1.pdf>.

We appreciate your acknowledgment of our changes to draft Appendix A in response to prior comments. Review by Board members is an important part of the process to update Appendix A. Comments from Board members, many from the Water Authority delegation, are discussed and

SDCWA Directors

February 19, 2013

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carefully evaluated, often resulting in clarifications or corrections to Appendix A. Your most recent comments and our responses are set forth below.

A-10: State Water Project operational constraints. Why is the last sentence of the first paragraph being deleted (the information is not outdated and remains relevant to July 2012 storage levels through July 2012)? Also, please reconcile the numbers reported in this paragraph with those contained in this month's Water Planning and Stewardship Committee, Item 6a, PowerPoint Presentation slide 21 of 27, Attachment 3.

This paragraph now discusses cumulative estimated losses to the State Water Project due to pumping restrictions for the 2008-2012 period, as well as disclosure of losses affecting calendar year 2013 deliveries as of the end of January. Information about State Water Project storage as of July 1, 2012 was outdated. State Water Project storage as of January 1, 2013 is found under the heading, "Storage Capacity and Water in Storage."

A-18: Sale of water by Imperial Irrigation District to SDCWA and MWD Exchange Agreement. The last sentence should be updated and corrected to reflect that IID did in fact meet its 2012 conservation obligation of 90,000 acre-feet, and, also delivered the additional 16,722 acre-feet of conserved water which MWD agreed to exchange and did exchange in 2012.

An update of this sentence is premature. We will revise it to be consistent with the Bureau of Reclamation's 2012 accounting of Colorado River deliveries after that accounting is released.

A-26: Discrepancies between the draft Official Statement and MWD's January 2013 WSDM staff report to Board of Directors RE MWD's storage capacity and actual water in storage. The draft Official Statement reports MWD's storage capacity to be 113,000 acre-feet lower and water in storage 4,000 acre-feet higher than MWD January 2013 Water Surplus and Drought Management report to the board of directors, Attachment 4. Please clarify the discrepancies.

The WSDM storage table and the Appendix A storage table are not intended to be apples-to-apples comparisons. The Appendix A storage table takes a longer-term view whereas the WSDM report is a short-term, month-to-month snapshot. The shorter-term WSDM report includes one-time or short-term capacity (Drop 2 reservoir storage credit that can only be used once and Article 56 carryover that is unpredictable over the longer term) that is not appropriate for the longer-term perspective of Appendix A. Appendix A includes capacity in the San Bernardino Valley Municipal Water District Coordinated Operating Agreement that was not included in the WSDM report because we do not plan to purchase water for storage under this agreement this year.

SDCWA Directors
February 19, 2013
Page 3

Also there are differences in timing. The Appendix A storage balances include regular accounting reconciliations for Lake Mead ICS and the DCWV Advance Delivery Account that were not available for the WSDM report table, resulting in a discrepancy of 4 TAF. There was a 3 TAF difference between the capacity listed for member agency storage programs in the two tables, some of which is attributable to rounding. We conformed Appendix A with the number in the WSDM report.

A-33: Replenishment and the sale of discounted water. It would be misleading to delete the discussion about a new storage program to replace the Replenishment Service Program unless these plans have in fact been abandoned by MWD and the member agencies. Just a few months ago, before the “rate refinement” process was terminated, MWD and the other member agencies had identified the sale of discounted water as a “top priority.” See Attachment 2, page 3 at A33 and A-52 and Attachment 1, page 6 at A-53.

We have restored a description of ongoing discussions.

A-44: Growth in number of unbudgeted MWD employees. Based on the edited numbers, MWD has added 93 employees since last October. Based on the presentation to the Board Budget Workshop on February 12, 2012, this number exceeds the budgeted employees by 45 employees (see slide, Attachment 5). What is the source of funding being used to pay the costs of the unbudgeted positions?

We have updated the employee count to February 13, 2013. Metropolitan has 33 fewer regular full-time employees as of that date than in October 2012. The numbers in the January draft were not correct.

A-48: Revised (“extended”) purchase orders as evidence of MWD’s projected water sales revenues. We believe it is misleading to discuss the revised Purchase Orders in the context of disclosures about MWD’s projected water sales revenues, for the reasons described in the letter from the Water Authority’s General Counsel to MWD’s General Counsel dated December 27, 2012, Attachment 6. Given that at least 19 of the 22 member agencies executing the revised Purchase Orders had already met the minimum revised purchase order commitment even before the extension, the revised Purchase Orders provide no meaningful assurances to investors about MWD’s future sales revenues.

The Purchase Orders set the Tier 1 limits of member agencies, as disclosed in this section. Purchase Orders were extended to keep the Tier 1/Tier 2 pricing signal in place. We have reorganized the paragraph and added a cross-reference to the description of the Tier 1/Tier 2 water supply rates to clarify this. We also made some clarifying edits in response to comments from co-bond counsel.

SDCWA Directors
February 19, 2013
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A-50: Source of funding to pay SDCWA to the extent it prevails in the litigation. MWD has not changed the following statement: “If Metropolitan’s rates are revised in the manner proposed by SDCWA in the complaint, other member agencies may pay higher rates unless other actions are taken by the board.” The Water Authority inquired about the basis of this statement when it was changed by MWD, because it is inconsistent with the claims being published by many MWD member agencies and at times by MWD itself. See Attachment 2, page 3 at A-50. Neither MWD nor its member agencies has explained why this change was made to the last draft Official Statement, which previously stated that, “If Metropolitan’s rates are revised in the manner proposed by SDCWA in the complaint, other member agencies would pay higher rates.” The language in the current draft Official Statement is inconsistent with the expectations described in the Fitch ratings that have just been assigned to MWD bonds [Friday, February 8, 2013 3:37 pm EST.]:

CASH RESERVES FOR RISK

The unrestricted cash amount above excludes additional restricted cash of \$67.5 million that is set-aside for disputed amounts paid by the San Diego County Water Authority (SDCWA), which are the subject of ongoing litigation. ***To the extent the litigation is decided in favor of SDCWA and Metropolitan Water District must make a payment to SDCWA, Fitch anticipates that any settlement would be collected from other member agencies in a timely manner.*** The litigation relates to the rate methodology used to allocate costs between members. (Emphasis added.)

The expected source of money that would be used to pay SDCWA is a material fact; at a minimum, it is something we believe an investor would be interested in knowing when considering whether to invest in MWD bonds.

The statement that “other member agencies may pay higher rates unless other actions are taken by the board” recognizes the board’s discretion over rates and charges. As I explained in my letter to you on October 25, 2012, “The Board may authorize a variety of actions to replace lost revenues and close a budget shortfall, including raising rates, reducing costs, restructuring of rates and charges, and other options depending on the circumstances.” The Fitch report does not prescribe the source of any settlement paid to SDCWA, but assumes that the settlement amount would be recovered from other member agencies.

A-51: More on MWD purchase orders. See comments above at A-48. In addition, MWD should disclose during the discussion at A-51 that its largest customer (see footnote 1 at page A-2) – the Water Authority – signed the revised Purchase Order under protest, and why. Further, MWD should note that it rejected SDCWA’s execution of the revised

SDCWA Directors
February 19, 2013
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Purchase Order. See Attachment 7, letter from MWD General Counsel to SDCWA General Counsel dated January 4, 2013.

The existing disclosure that there are 22 Purchase Orders now in effect is accurate. SDCWA provided its Purchase Order extension under terms that showed its lack of consent to, and unwillingness to be bound by, the terms of the agreement, as described by Metropolitan's General Counsel in Attachment 7 to your letter. Mutual consent is necessary to reach an effective agreement. However, the circumstances under which SDCWA's existing purchase order expired are not material to investors.

A-52: Inaccurate, ex post facto characterization of how Replenishment Service Program was operated. The edits to the first sentence of the Replenishment section change the prior statement describing program *objectives* to an inaccurate statement of fact about purported benefits of the sale of discounted water as replenishment. See discussion at Attachment 1, page 6 at A-53 and Attachment 2, page 3 at A-33 and A-52.

We have revised this paragraph to take your comments into account.

A-55: MWD's financial reserve policy, the use of "unrestricted reserves" as "collateral" and failure to establish a separate interest bearing account for SDCWA litigation deposits. It is not possible to confirm from the information and commingled descriptions provided at A-55 whether MWD is in compliance with its financial reserve policies. One thing that is clear is that MWD has failed to establish a separate interest bearing account for SDCWA litigation deposits as required by the Exchange Agreement. The very purpose of the requirement of a "separate interest-bearing account" was to *restrict* MWD's use of those monies for other purposes. MWD has also failed to explain how reserve balances that are held as collateral can be described as "unrestricted." See Attachment 1, page 8 at A-81. No response to this question has been provided by MWD.

I responded to your comment about collateral deposits in my November 19, 2012 letter. SDCWA litigation deposits also are accounted for in Metropolitan's reserves. It is accurate to include them in the section discussing reserve deposits.

A-72: Inclusion of Bay Delta Conservation Plan construction costs in projected costs of MWD for State Water Project water. Please identify what construction costs have been included in the 2016 and 2017 projected costs for anticipated construction of additional State Water Project facilities.

See footnote 4 to the table, "Projected Costs of Metropolitan for State Water Project Water."

SDCWA Directors

February 19, 2013

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A-74: Failure to raise rates to fund pension and Other Post Employment Benefits (OPEB) liabilities. As of January 1, 2011, MWD's combined unfunded retiree health care obligation and unfunded pension liability is at least \$757 million. When this number is next updated, the number will likely approach the \$1 billion mark. Although there are many disclosures of fact in the draft Official Statement, the burden of this liability on future water ratepayers and the cost of water are not described. MWD's plan to "begin OPEB funding above annual pay-as-you-go amounts with \$5 million in the fiscal year 2012-13 budget" and statement that it "intends" to increase this amount by \$5 million per fiscal year to an annual funding amount of \$25 million beginning in fiscal year 2016-17 defies the reality of other statements that it will, at the same time, begin construction of the BDCP and hold rate increases to 3%. This estimate pales in comparison to MWD's average annual rate increases of 5.6% over the past 30 years (1984-2014), and its average annual rate increases of 7.9% over the past 10 years (2004-2013). It is difficult to imagine that MWD will impose far lower annual rate increases, while at the same time invest billions of dollars more on its Bay Delta water supplies and begin modest payments to its unfunded OPEB liability. Further, given that the MWD board has not been willing to raise water rates now to pay for these liabilities, one is left to wonder why it will be willing to do so in the future at a time when MWD's BDCP costs are substantial.

Metropolitan's funding of its pension and OPEB costs, projected funding requirements from PERS, budget projections and actuarially-determined unfunded liability are fully disclosed. This disclosure is factual based on Metropolitan's financial results and budget and PERS projections. The five-year budget projections already include a build-up of pension costs and a plan to fund the actuarially required contribution (ARC) for OPEB. Your statement in the above paragraph is speculative and unsupported by Metropolitan's current projections. See our response to your next comment.

A-80: Management's projections and assumptions concerning future events and circumstances that may impact MWD's revenues and expenditures are unreasonable. Based on all of the detailed comments we have provided in regard to past draft Official Statements, and other resource planning and financial issues at MWD, we do not believe that management's projections and assumptions as described in the draft Official Statement are reasonable. MWD's continued reference to long-outdated planning documents in its Official Statement is a matter of concern to us and should be a matter of concern to investors, not the least of which is the 1999 Long Range Finance Plan which even MWD has abandoned as a planning document for board planning purposes. Aside from all of the data, simple common sense suggests that there is no way that MWD can do everything that it says it will do beginning in 2016 (IRP projects, construction of BDCP and increase payments to OPEB) and at the same time, hold rate increases to 3 percent – all at the same time its sales are down 25% and its member agencies are constructing and planning more local water supply

SDCWA Directors
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projects throughout Southern California to reduce their demand for increasingly expensive imported water supplies.

Metropolitan's projections and assumptions described in Appendix A are founded on current Board-approved policies, approved budgets and current, conservatively-based projections. The Long Range Finance Plan, originally adopted in 1999, is cited as the source of the Metropolitan's minimum/maximum financial reserve policy. This policy, as subsequently amended by the Board, is included in Administrative Code section 5202. The Integrated Resources Plan, most recently updated in October 2010, provides a framework for regional water resources development over a long-term planning horizon. It seeks to provide regional reliability through 2035, with regional collaboration, by stabilizing Metropolitan's traditional imported water supplies, continuing to develop local resources, and providing adaptive long-term planning for contingency resources.

The biennial budget for fiscal years 2012-13 and 2013-14 and the five-year projections contained in the adopted budget provide funding for core IRP projects (such as construction costs for Bay-Delta conveyance anticipated to be paid by State Water Project contractors), local resources projects, and pension and OPEB. The budget and five-year forecast conservatively assume water sales at levels fifteen percent below Metropolitan's long-term sales average. The twenty-five percent drop in sales cited in your letter compares a single-year low to a single-year peak, a less stable assumption than the long-term sales average. Moreover, the conditions that generated this drop (described in Appendix A) are returning to normal. Current year financial performance is exceeding expectations, illustrating the reasonably conservative level of Metropolitan's water sales assumptions.

The projections cited in Appendix A indeed should cover costs of providing reliable supplemental water supplies for Metropolitan's service area with annual average rate increases of 3-5 percent over the next five years, based on budget assumptions. Actual results are likely to differ from projections. The goal of each Official Statement is to disclose material current facts and reasonable projections, the bases for those projections and the factors that could affect future performance—all founded on reasonable assumptions.

We appreciate your careful review of the Official Statements.

Sincerely,



Gary Breaux
Assistant General Manager/Chief Financial Officer

The Metropolitan Water District of Southern California

SDCWA Directors

February 19, 2013

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cc: J. Kightlinger
M. Scully
MWD Board of Directors
SDCWA Member Agencies



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

November 19, 2012

Director Keith Lewinger
Director Vincent Mudd
Director Fern Steiner
Director Doug Wilson
San Diego County Water Authority
4766 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated November 5, 2012, regarding Board Letter 8-1

This letter responds to your proposed edits to the October 24, 2012, draft of the Official Statement for Metropolitan's Water Revenue Refunding Bonds, 2012 Series G, attached to Board Letter 8-1. Chairman Foley asked me to respond to your letter.

A-3 – Integrated Water Resources Plan

The description added of the 2010 IRP update as an “adaptive management approach” is misleading. The IRP estimated water sales numbers are substantially higher than those used in Metropolitan's Urban Water Management Plan or disclosed in its offering statements. As noted in the August 20 letter on page 1, **Reduced Sales**, Metropolitan has finally reduced its water sales projections by 300,000 AF for FY 2013, 400,000 AF for FY 2014, and 350,000 AF for FY 2015, from those predicted in September 2010. However, these flawed numbers are still contained in Metropolitan's IRP, and Metropolitan's IRP is still being used as the basis of its water resources planning and spending decisions. Calls to update the IRP or adjust spending decisions to *adapt* to these reduced demands have gone unheeded. Apparently, Metropolitan believes that its water sales can only “adapt” to increase, but never to decrease. This is a materially-flawed planning assumption that is inconsistent with known facts.

Metropolitan should also include in the discussion of its IRP implications of the recent *Preserve Wild Santee* case noted in footnote 1 of this letter.

Your comment confuses the range of demands analyzed in Metropolitan's Integrated Resources Plan and the 2010 IRP Update with the water sales base used to set biennial budgets and determine water rates. The IRP resource mix addresses a range of possible supplies and demands, from 1.5 million acre-feet (MAF) to 2.5 MAF, that Metropolitan and its member agencies will manage adaptively to meet changing conditions through 2035. The water sales projections used to determine Metropolitan's biennial budget and rates, 1.7 MAF for each of fiscal years 2012-13 and 2013-14, have been conservatively set near the lower end of the range analyzed in the IRP so that there is a reasonable certainty that the sales estimate will be met or exceeded. The IRP is updated about every five years; the water sales projections are updated for every budget and rate cycle.

The draft that you reviewed explains the distinction between financial planning and resource planning projections, in response to earlier comments from SDCWA directors, on page A-77: "Metropolitan has conservatively set the water sales projections in the following table (of Historical and Projected Revenues and Expenditures) *which are below its projections for resource planning purposes.*" (Italics added.) This page also discloses that Metropolitan's water sales assumptions have been questioned by SDCWA directors.

The *Preserve Wild Santee* case has no implications material to holders of Metropolitan's bonds.

A-18 – Sale of Water by the Imperial Irrigation District to SDCWA

Add to the last sentence of the first full paragraph at page A-19, "and Metropolitan has agreed to convey and exchange to the Water Authority in 2012 an additional 16,722 acre-feet of Conserved Water, regardless of the pending dispute between the parties as to whether the water was actually made available in 2011."

Pursuant to your suggestion, updated Appendix A states: "Metropolitan has agreed to exchange with SDCWA up to an additional 16,722 acre-feet in 2012 if IID delivers that volume of conserved water after IID has met its 2012 obligation of 90,000 acre-feet."

A-31 – Los Angeles Aqueduct

Disclosure should be made of the litigation that the City of Los Angeles has recently filed challenging its Eastern Sierra environmental mitigation obligations. The implications of this litigation should also be added at page A-12 discussing the open-ended "decision tree" process for determining environmental mitigation requirements associated with the Bay Delta Conservation Plan.

Pursuant to your suggestion, Appendix A briefly describes the City of Los Angeles litigation challenging its environmental obligations.

A-34 – Seawater Desalination

The offering statement has embedded Metropolitan's disclosure of the SDCWA's Carlsbad seawater desalination project in the discussion about its own subsidy program in a manner that is misleading and creates the impression that implementation of the SDCWA's project depends upon execution of the original multi-party incentive agreement in which Metropolitan was a party. Metropolitan is not a party to the SDCWA's draft water purchase agreement with Poseidon. We suggest deleting the following sentence that was added to the middle of the last paragraph on page A-34, "In late September 2012, SDCWA released a draft water purchase agreement with Poseidon for public review." The same sentence is included in the paragraph that has been added at the top of page A-35, where it is less misleading.

The sentence you identified was moved pursuant to your suggestion. This paragraph clearly discloses that the original multi-party agreement approved by Metropolitan was not executed and that SDCWA is considering a draft water purchase agreement with Poseidon Resources LLC.

A-48 – Water Sales

While we appreciate the addition of footnote 3 to disclose that 225,000 acre-feet of Metropolitan's 1,676,855 acre-feet of water sales in 2012 were replenishment sales, the report of Metropolitan's water sales remains misleading as a result of its use of "averages" and its inclusion of its transportation and exchange of the SDCWA's Colorado River water as "water sales" by Metropolitan. Providing more detailed information about *actual sales* rather than "average" sales would help investors understand important and substantial trends in the volume of sales and price of Metropolitan water.

We did not make this edit. The presentation of water sales in Appendix A, with wheeling and exchange revenues included in water sales, is consistent with presentations in prior Official Statements. This presentation was developed by the financing team to consistently show changes in Metropolitan's rates and charges over the reporting period and Metropolitan's accounting for such revenues. Wheeling and exchange revenues are included in aggregate water sales, as in previous offering statements, and are separately disclosed under the heading "Wheeling and Exchange Charges."

Actual water sales and water revenues are disclosed in the Summary of Receipts by Source, Ten Largest Customers, Historical and Projected Revenues and Expenditures and other financial tables. Actual acre-feet sold and receipts are disclosed on the Summary of Water Sold and Water Sales Receipts table. Averages (average receipts per acre-foot and average rate per 1000 gallons) are provided to show average impacts across the range of Metropolitan's rates. The formula used to calculate these averages is described in footnote 5 to the table. This footnote cross-references the table of actual rates to avoid confusion.

A-52 – Member Agency Purchase Orders

Metropolitan fails to disclose the conclusion reached by Metropolitan's own staff and reported to the board of directors, that the use of Purchase Orders fails to meet the Board's articulated objective of providing for an annual assured revenue stream sufficient to pay Metropolitan's costs. Metropolitan's Purchase Orders are also subject to the requirements of state law and the state constitution including but not limited to Proposition 26.

The existing description accurately summarizes the current terms of the purchase orders, including board authorization of a two-year extension. The purchase orders define the Tier 1/Tier 2 price point and provide a Tier 2 price signal. Metropolitan believes that the purchase orders conform to the requirements of California law.

A-53 – Classes of Water Service (Replenishment)

The description of the "Replenishment Service Program" as a sound water resource and financial program is inconsistent with Metropolitan's own assessment of the Program as featuring "questionable and unquantifiable performance criteria for a discounted water program," loss of full service sales due to the availability of discounted water and the unequal distribution of costs and benefits among the member agencies. Given that Metropolitan has disclosed that it remains in discussion with its member agencies about how to continue discounted water sales under a new label ("incentive-based water storage program"), the last paragraph of this section, describing the fact that discounted water sales offset full service water sales, should not be deleted.

The description of historic replenishment sales was and is factually accurate. In response to your comments, we have clarified the status of discussions of a program to replace replenishment service. Such discussions may continue in the future.

A-65 and A-70 – Variable Rate and Swap Obligations

Metropolitan has added a number of disclosures in its official statement regarding a possible loss in the value of its existing swap transactions that could be as high as \$169 million if interest rates remain unchanged or do not increase substantially during the remaining life of the swap agreements which range between 8-12 years. Further, it appears that the counterparty holding the swap can elect to terminate during optional dates which would result in an immediate loss to Metropolitan. This should also be disclosed in Metropolitan's offering statement. Please advise if this is a correct interpretation of the disclosures added to the offering statement and whether these investments are consistent with the board's investment policy.

Your interpretation is not correct. The market value of Metropolitan's interest rates swaps are an estimate of termination payments to its swap counterparties should all of Metropolitan's interest rate swaps be terminated at the referenced date. There is no "loss of value" to Metropolitan, rather a recognition of the market value of each swap. As stated in Appendix A, Metropolitan does not anticipate early termination of any of its interest rate swap agreements due to defaults or occurrence of a termination event. Metropolitan's swap counterparties do not have optional termination rights, while Metropolitan does have the right to early termination of an interest rate swap (which it exercised for all or a portion of various swap agreements in June 2012 as referenced in Appendix A). Upon Metropolitan holding any or all of an interest rate swap agreement through its final term, the swap will terminate at par (that is, the market value of the interest rate swap will be zero) and neither party will have a payment obligation to the other party. All of Metropolitan's interest rate swap agreements are in compliance with Metropolitan's Master Swap Policy.

A-79 – Historical and Projected Revenues and Expenditures

See discussion at A-48 and footnote 5 of this letter, that the word, "discounted" should be added before the words, "replenishment sales" in footnote (b) at page A-80.

In addition, given (1) Metropolitan's actual water rate increases as described; (2) Metropolitan's reduced water sales as described at section A-3 of this letter; (3) the time line within which Metropolitan is legally required to disclose and begin to manage payment of its combined unfunded retiree health care obligation and unfunded pension obligation currently totaling \$757 million; and (4) the projected time line for BDCP implementation, there is no reasonable basis for the statement by MANAGEMENT that "rates and charges are projected to increase 3.0 percent per fiscal year" beginning in 2015 and thereafter. The *actual* rate increases over the past five years are a far better indicator of Metropolitan's future rate increases than the projection by MANAGEMENT.

Actual rate increases over the past five years are material information to help investors judge Metropolitan's financial performance. Thus Appendix A includes a table showing all rates, including replenishment rates, in effect back to January 1, 2008. Anticipated increases are based on cost projections and the conservative sales projections discussed multiple times in Appendix A and in this letter, which are derived from and consistent with budget documents, the Integrated Resources Plan, and financial reports. As discussed, Appendix A describes sales trends, details of revenues and expenditures, and the basis for future projections. Together this information provides a materially accurate representation of historical and projected revenues and expenditures.

A-81 – Board direction to staff to evaluate cost-of-service methodology to ensure that all rates and charges recover the full cost of service effective January 1, 2011

It should be disclosed that the SDCWA's MWD rate litigation alleges that Metropolitan has failed to properly allocate its costs proportionally among the member agencies that

benefit. The staff has also failed to comply with this board direction by failing to include in its cost of service a credible plan to pay the cost of Metropolitan's unfunded retiree health care obligation and unfunded pension obligation – currently totaling \$757 million. Given that investors rely upon the willingness of the Metropolitan board to raise water rates sufficiently to cover its expenses, it should be clearly disclosed in the Official Statement that these costs are not covered by the water rates and charges recommended by staff and approved by the board of directors.

Your comment fundamentally misrepresents Metropolitan's rate setting process. As we have previously reported and discussed, Metropolitan sets rates prospectively to recover anticipated costs of service, in the aggregate. Metropolitan's postage stamp rates recover system-wide costs; neither costs nor revenues are allocated to specific member agencies. The Board's direction in April 2009 that staff study the cost-of-service methodology with the intent to ensure that all rates and charges recover the full cost of service effective January 1, 2011, shows the Board's intent to set rates that fully recover costs and reduce reliance on reserves. This direction produced a cost-of-service review by the Long-Range Finance Plan working group in summer 2009, and Board approval of the existing methodology in November 2009. The recommended rates and revenue requirements January 2010 for rates to be effective January 1, 2011 were anticipated to meet projected costs of service. The adopted rate increases are listed following the sentence targeted in your comment.

SDCWA's allegations about Metropolitan's rates are summarized under "Litigation Challenging Rate Structure." This summary is referenced in the body of the Official Statement and various places within Appendix A, including a new reference to the litigation in the introductory list of Metropolitan's member agencies. Appendix A describes Metropolitan's pension and retiree healthcare costs, their funding status, and cost projections under "Defined Benefit Pension Plan."

A-81 – "Unrestricted" Reserve Balances

We do not understand how reserve balances that are held as collateral can be described as "unrestricted." Please explain.

We have clarified this language in response to your comment. Collateral that Metropolitan is required to post to its swap counterparties originates from the unrestricted reserve balances. While held as collateral, these amounts are contractually restricted. Should Metropolitan's swap counterparties be required to post collateral to Metropolitan in the future, then those amounts would also be held in the unrestricted reserve balances (or Metropolitan's General Fund), and will be contractually restricted as to use.

SDCWA Directors
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Again, board member review of the information about Metropolitan in Appendix A is a key part of the disclosure process. We have responded to your proposed edits as described above. Your November 5 letter also reiterates your opinions on points that you raised in your letter of September 4, 2012. We will not repeat the responses that we provided in the October 25 response to your October 8 letter. Your views and Metropolitan's responses have been clearly stated and another repetition would not be productive.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Breaux". The signature is fluid and cursive, with a prominent initial "G" and "B".

Gary Breaux
Assistant General Manager/Chief Financial Officer

cc: J. Kightlinger
MWD Board Members
SDCWA Board Members and Member Agencies



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

October 30, 2012

Director Lynne Heidel
Director Keith Lewinger
Director Fern Steiner
Director Doug Wilson
San Diego County Water Authority
4766 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated October 8, 2012, regarding Board Letter 8-3—Approve the form of the amended and restated Purchase Order and authorize amendment of Section 4122 of the Administrative Code

Chairman Foley asked me to respond to your letter regarding the form of amended and restated Purchase Order approved by the Board on October 9, 2012.

Your letter contains detailed comments and concerns, most of which were addressed in the staff presentation at the Finance and Insurance Committee on October 8, 2012, and the committee discussion. We will not address them again here. The purpose of this response is to correct your assertion that the Board's action on November 8, 2011, approving the City of Compton's request to withdraw its purchase order, is a new policy that should be included in the amended purchase orders.

The November 2011 board letter explained Compton's reduced water purchase trend due to operational changes that occurred after execution of its purchase order. Upon withdrawal of the purchase order, Metropolitan revised Compton's Tier 1 limit and will require Compton to pay the Tier 2 Supply Rate on any future water purchases over the revised lower limit.

The Board's action last November approved only the Compton purchase order withdrawal. If other member agencies make similar requests, they must meet the same conditions, but the Board would consider similar requests from other member agencies individually. This is required under

SDCWA Directors
October 30, 2012
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Administrative Code Section 4404(b) and consistent with the November 2011 board letter. Thus it is not accurate to characterize the November action as a generally-applicable board policy or appropriate to include it in the amended and restated purchase orders.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Breaux". The signature is stylized with a large initial "G" and "B".

Gary Breaux
Assistant General Manager/Chief Financial Officer

cc: MWD Board of Directors
SDCWA Board of Directors



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

October 25, 2012

Director Keith Lewinger
Director Fern Steiner
Director Doug Wilson
San Diego County Water Authority
4766 Overland Avenue
San Diego, CA 92123

Dear Directors:

Your letter dated October 8, 2012, regarding Metropolitan's September 4, 2012 response to SDCWA comments on Appendix A to Remarketing Statement and Official Statement

This is in response to your letter dated October 8, 2012, regarding our response dated September 4, 2012, to your comments on Appendix A to Metropolitan's Remarketing Statement and Official Statement. Again, we appreciate your detailed review of Appendix A.

Metropolitan's offering statements are prepared to give investors material information about Metropolitan and its bond offerings. If there is a substantial likelihood that a reasonable investor would consider the information to be important to his or her decision whether to invest in the bonds described in the offering statement, the information is material. Issuers make judgments as to what information is material each time an offering statement is prepared. We make these judgments with assistance from outside counsel, financial advisors, underwriters and their counsel, and other professionals. All changes are subject to review and approval by the General Manager and General Counsel, under authority delegated by the Board.

Board member review of the information about Metropolitan in Appendix A is a key part of the disclosure process. Appendix A is continuously reviewed and may be updated up to the time it is posted for distribution to investors. We carefully consider each comment from board members, staff and the financing team to correct errors, clarify ambiguities and add relevant, material information. When comments request added information, we review the proposed insert for accuracy and materiality. Appendix A includes primarily historical information. Projections reported in Appendix A are derived from and consistent with Metropolitan's budget documents, resources planning documents, and financial reports. Projections that are not supported by or are contrary to the projections in the adopted budget, Integrated Resources Plan or other published documents, speculative statements and policies that are subject to board debate or future board action have no place in Appendix A.

Your October 8 letter asserted that the Board has not adopted the conservation commitment by Metropolitan that was described in the Bay-Delta Conservation Plan discussion of the draft Appendix A submitted to the Board for comment. This commitment is in fact consistent with the IRP and planning goals approved by the Board, not a commitment requiring additional board action. We deleted the reference to this commitment on pp. A-11-12 in response to your comment to avoid similar confusion by investors.

Similarly, your comments on the Appendix A description of the water transfer from Imperial Irrigation District to SDCWA and the Exchange Agreement between Metropolitan and SDCWA prompted us to look more closely at this language which, as your letter noted, has remained the same for some time. The changes conformed the description more closely to the language in the Exchange Agreement and updated it to describe the Notice of Default and additional invoice to SDCWA, as you requested.

Your October 8 letter alludes to substantial risks to Metropolitan and its ratepayers if the QSA agreements are interrupted. Appendix A describes the litigation challenging the QSA agreements and states that such impacts cannot be determined at this time. It would be speculative to assume that none of the programs developed under the QSA that now benefit Metropolitan would survive and that no alternatives could be negotiated by the parties.

Appendix A describes Metropolitan's role as a supplemental supplier, with sales varying according to a number of factors listed on p. A-30. The table on A-30 shows regional water supplies for the years 1971 through 2011 from the State Water Project, Colorado River Aqueduct, Los Angeles Aqueduct, and local supplies. Even taken out of context, the sentence on this page that is cited in your letter does not "suggest the possibility that, in the future, *no amount* of water will be derived from sources other than Metropolitan." In context, it is clear that no such possibility is suggested.

The table on A-30 shows why Appendix A includes a separate discussion of the Los Angeles Aqueduct. The Los Angeles Aqueduct is a significant source of local water supplies available to meet demands within Metropolitan's service area. Metropolitan updates the information about the Los Angeles Aqueduct in consultation with staff from the Department of Water and Power. The AVEK turnout is identified because of its capability, when completed, to deliver water to Los Angeles not to exceed the amount of supplies lost to the City as a result of its Eastern Sierra environmental obligations. The not-to-exceed amount is the fact relevant to investors.

Appendix A also specifically describes the IID-SDCWA water transfer, another significant source of local supplies within Metropolitan's service area. Other local water supply sources are described by category, including surface runoff, groundwater, groundwater storage programs and conjunctive use, groundwater recovery, recycled water and seawater desalination. Metropolitan's water sales projections are the result of a comprehensive retail demand, conservation and local supply estimation process described under "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES." This process includes supply projections from member agencies and other local water providers, past conservation savings and estimates for future conservation from 20 by 2020 goals. A board report dated August 16, 2011, compared Metropolitan's planning projections with supply and demand projections reported in Urban Water Management Plans filed by six

member agencies (SDCWA, MWDOC, IEUA, Central Basin MWD, West Basin MWD, and LADWP) that historically receive about 70 percent of Metropolitan's total water deliveries. Metropolitan's projections of total retail demand after conservation were on average 6 percent lower than the sum of the six member agencies. Metropolitan's projections for total local supplies to be developed by member agencies were on average 4 percent lower than the projected total for the six member agencies. Projected demands for imported water as shown in Metropolitan's Urban Water Management Plan are on average 8 percent lower than the total of the six member agency projections. A comprehensive analysis of all 26 member agencies performed after this report validated the reasonableness of Metropolitan's projections compared to member agency Urban Water Management Plans.

The description of replenishment rates was revised in response to your suggestions to point out that no replenishment rates were adopted for 2013 and 2014, and no replenishment sales were included in the biennial budget. Similarly, we reviewed and clarified the description of actual and projected pay-as-you go (PAYGO) funding compared to projections in prior years, in response to your comment. The disclosure already describes the Board's funding objective to fund all CIP expenditures for replacements and refurbishments of facilities from current revenues, and points out that the Board may reduce or increase the amount of PAYGO expenditures during the fiscal year to reduce drawdowns of reserve balances and mitigate financial risks. We declined to speculate on the "real reason" for PAYGO reductions.

Our edit on A-50 resulted from financing team comments and was made to recognize the Board's discretion over rates and charges. The Board may authorize a variety of actions to replace lost revenues and close a budget shortfall, including raising rates, reducing costs, restructuring of rates and charges, and other options depending on the circumstances.

Changing the basis for projected costs for State Water Project Water, in footnote 1 on A-72, from "water purchase estimates" to the adopted biennial budget merely identified the source document for the estimates. Contrary to your assertions, Appendix A is prepared to fulfill Metropolitan's disclosure obligations to investors, not to "shore up" arguments in the rate litigation.

Sincerely,



Gary Breaux
Assistant General Manager/Chief Financial Officer

cc: J. Kightlinger
M. Scully
MWD Board of Directors
SDCWA Member Agencies

From: Gonzales, Joann on behalf of Breaux, Gary M
Sent: Friday, September 07, 2012 1:06 PM
To: 'Doug Wilson (dirdougwilson@gmail.com)'
Cc: Kightlinger, Jeffrey; Scully, Marcia L; Aaron A. Grunfeld (agrunfeld@grunfeldlaw.com); Aldrete, Isabel; Arakawa, Stephen N; Barrio, Virginia N; Beatty, Heather C; Bennion, Sydney B; BilWri@att.net; Breaux, Gary M; Brett R. Barbre (brbarbre@msn.com); Brick, Timothy F; Cable, Jeffrey L; Chin, Dawn; Cole, Kathy; Daniel E. Griset (dgriset@earthlink.net); De Jesus, David D; David Fleming (david.fleming@lw.com); David Fleming (dwf920@gmail.com); Dawn Chin (Business Fax); Diana Sanchez (dirdsanchez@gmail.com); Dick, Larry D; Doug Wilson (dirdougwilson@gmail.com); Edward C. Little (dirlittle@gmail.com); Edward C. Little (lmlover@pacbell.net); Fern Steiner (dirsteiner@gmail.com); Fern Steiner (fsteiner@tosdalsmith.com); Gagar Downing, Maria C; Gil de Montes, Melani C; Glen D. Peterson (dirpeterson@gmail.com); Glen D. Peterson (preferred) (glenpsop@aol.com); Glenn A. Brown (gabrown@prodigy.net); Glisson, Brenda S; Gloria Gray (ggrayi@aol.com); Gloria Gray (mwdggray@gmail.com); Gonzales, Joann; Grandsen, Ted; Green, Jim; Hasencamp, William; Hicks, Ralph T; Hiltcher, Brad L; Ivey, Gilbert F; jabdo@msn.com; Jackson, Beverly; Jackson, Ellen R; James T. Edwards (btinsur@sbcglobal.net); James T. Edwards (dirjedwards@gmail.com); Jesus E. Quinonez (jquinonez@hgmq.org); John T. Morris (dirmorris@gmail.com); Morris, John T; John V. Foley (Home Fax); John V. Foley (jvfoley@cox.net); John W. Murray Jr. (jmurray@jwmjr.org); Keith Lewinger (preferred) (Keith.Lewinger@gmail.com); Kightlinger, Jeffrey; Kristine Murray (krismurray@sbcglobal.net); Laura Friedman (lfriedman@ci.glendale.ca.us); Linda Ackerman (Dirackerman@gmail.com); lindaackerman@cox.net; Lowenthal #2 (Heather.Burke@longbeach.gov); Lynne L. Heidel (dirheidel@gmail.com); Lynne L. Heidel (lheidel@sanlawyers.com); Man, Debra C; Mares, Feedy; Melendez, Jennie A; Michael Camacho (dircamacho@gmail.com); Michael Camacho (mcamacho@pacificaservices.com); Miyashiro, Jody M; MorrisWater@Earthlink.net; Murray Kristine (kmurray@anaheim.net); Murray, K's aide ; Murray, K's assistant ; Patterson, Roger K; Phillip D. Hawkins (philh@centralbasin.org); Philp, Thomas S; Randy A. Record (preferred) (dirrecord@gmail.com); Riss, Gerald C; Robert Wunderlich (rwunderlich@discoveryecon.com); Rudy C. Montalvo (rudym@centralbasin.org); Sanchez, Diana; Scully, Marcia L; Stephen Millard (stephen.millard1@verizon.net); Lowenthal, Suja; Suja Lowenthal (suja@longbeach.gov); sylviaballin2@verizon.net; Thomas P. Evans (evanswmwd@gmail.com); Timothy F. Brick (tfbrick@gmail.com); Tubbs, Brian A; Upadhyay, Devendra N; Waade, Linda D; Wakiro, Rosalind; Walters, Geraldine J; Wolfe, Roy L; Yamasaki, Edith K; Zinke, Dee
Subject: Response to your letter dated August 16, 2012



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

September 7, 2012

Director Doug Wilson
San Diego County Water Authority
4677 Overland Avenue
San Diego, CA 92123

Dear Director Wilson:


This is in response to your letter dated August 16, 2012 (copy attached), regarding issues related to Metropolitan's finance plan and water rates that you asked be included for discussion at Metropolitan's rate refinement workshop on August 20, 2012.

The issues raised in your letter were discussed at that workshop and have been discussed at various committee/board meetings and public workshops throughout the past year. These meetings, convened by Metropolitan, were open to the public to provide the opportunity for a thorough discussion. The meetings were also available to the public via web-streaming at Metropolitan's webpage: www.mwdh2o.com. In addition to the public meetings, these issues were fully reviewed and discussed with the Member Agency Rate Refinement Workgroup, and also when I met with you in my office following the August 20, 2012 workshop.

To ensure a continued open and transparent process, available to both the public and the full board, the policy debate of these important issues will continue to be discussed at public meetings involving Metropolitan's Finance and Insurance Committee, and/or at full board meetings, and public workshops.

I thank you and the Water Authority for the continued input on these important policy issues.

Sincerely,



Gary Breaux
Assistant General Manager/Chief Financial Officer

Attachment

cc: MWD Board of Directors
J. Kightlinger
M. L. Scully



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San Diego County Water Authority

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(858) 522-6600 FAX (858) 522-6568 www.sdcwa.org

August 16, 2012

Gary Breaux
Chief Financial Officer
Metropolitan Water District of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

MEMBER AGENCIES

- Carlsbad Municipal Water District
- City of Del Mar
- City of Escondido
- City of National City
- City of Oceanside
- City of Poway
- City of San Diego
- Fallbrook Public Utility District
- Helix Water District
- Lakeside Water District
- Olivenhain Municipal Water District
- Otay Water District
- Padre Dam Municipal Water District
- Camp Pendleton Marine Corps Base
- Rainbow Municipal Water District
- Ramona Municipal Water District
- Rincon del Diablo Municipal Water District
- San Dreguito Water District
- Santa Fe Irrigation District
- South Bay Irrigation District
- Vallecitos Water District
- Valley Center Municipal Water District
- Vista Irrigation District
- Yuima Municipal Water District

Re: Rate Refinement Workshop

Dear Gary,

I wanted to give you some of my thoughts on the issues the rate refinement board workshop should include on MWD's finance plan and water rates. The "big picture" was described in the July 9, 2012 letter the San Diego board members sent to Chairman Foley requesting the workshop. That letter included concern for MWD financial stability given the high fixed costs versus low fixed revenues and questions how MWD will ensure sufficient revenues to pay its future costs and avoid stranded investments. Chairman Foley indicated that a workshop would be held. To assist in your preparation for the workshop, I went back through some of the other letters we have written to MWD on issues of concern and I thought it might help you to provide a short list of some of the key questions.

1. How can MWD execute a long term contract for the BDCP unless it has an assured source of revenue to make the payments?
2. Are ad valorem tax increases on a regular basis a real possibility? If so, what steps need to be taken to advance that approach? And, could this be the realistic solution to fund the BDCP?
3. Will the member agencies agree to sign take-or-pay contracts? If not, isn't MWD being asked to carry all of the risk of stranding the BDCP and other investments? Is that a reasonable risk for our board to agree to assume?
4. What will happen if MWD's sales continue to decline at the same time we continue to embark on new projects? How will MWD's liabilities be paid? What legal mechanism exists to recover stranded costs? Will MWD be required to sign so-called "step up" agreements on the remaining ratepayers could have to cover if the other State Water Contractors default?
5. Are peaking costs being adequately charged and collected under the current rate structure? With so many MWD costs being incurred to meet dry-year peaking demands (not just for treated water), what mechanisms can MWD put in place in order to send the right price signal to ensure that agencies generating peaking costs are in fact paying those costs? Our calculations show that the current capacity and RTS charges do not fully recover these peaking costs.
6. In light of reduced sales projections, does it make sense for MWD to continue to pay its member agencies to NOT buy MWD water?
7. Given that the 20% by 2020 requirement is a retail requirement, and that MWD sales are down by more than 30%, does it make sense for MWD to continue to make current investments in water conservation? Or, should it defer those investments until sales begin

OTHER REPRESENTATIVE

County of San Diego

to improve? Why hasn't our adaptive IRP adapted to reduced sales?

A public agency providing a safe and reliable water supply to the San Diego region

Mr. Breaux

August 16, 2012

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8. If MWD is going to make additional investments in water conservation, shouldn't it reduce the amount of money it is spending on other water supplies by a like amount?
9. How will MWD ensure that its revenues are in fact sufficient to meet its operating expenses over the next five years? At my local agency at Padre Dam, we call this "living within the household budget". That is to say that expense is reduced to match the long term revenue stream, not the reverse.
10. What are the risks associated with projecting water sales based on "average" pricing? Will groundwater agencies buy as much water from MWD if it isn't discounted? Will other agencies pay more in order to subsidize discounted water sales especially as agencies develop new local supplies reducing their dependence on Met?
11. Given all of the changed circumstances, including the increasing cost of MWD water, is it reasonable to rely on historical data in projecting future water sales?

There are other issues and questions but this is a pretty good list of the issues I see that the Water Authority has raised over the past couple of years. We look forward to working with you and our fellow board members to ensure MWD's future and long term fiscal sustainability.

Sincerely,



Doug Wilson

Director

Attachments (without original enclosures):

1. July 9, 2012 re: Update on Rate Refinement Discussions
2. July 22, 2012 re: Board item 8-3 (LRP)
3. May 7, 2012 re: Board item 8-4 (conservation program)
4. March 21, 2012 re: Recommendation to cap MWD rate increases at 3%
5. March 12, 2012 re: LRPs
6. February 13, 2012 re: Board item 8-2 (draft remarketing statement)
7. February 3, 2012 re: Biennial budget
8. December 13, 2011 re: SB60
9. November 4, 2011 re: Board item 8-8 (discounted replenishment program)
10. October 25, 2011 re: KPMG audit report
11. October 7, 2011 re: WP&S items
12. August 22, 2011 re: Draft official statement
13. August 16, 2011 re: Member agency willingness to sign take-or-pay contracts
14. May 6, 2011 re: Board item 5-2 (sale of discounted water)
15. December 9, 2010 re: Draft official statement
16. September 22, 2010 re Draft official statement



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

September 4, 2012

Director Lynne Heidel
Director Keith Lewinger
Director Fern Steiner
Director Doug Wilson
San Diego County Water Authority
4766 Overland Avenue
San Diego, CA 92123

Dear Directors:

Comments on Appendix A to Remarketing Statement and Official Statement

Chairman Foley has asked me to respond to your comments to the draft Remarketing Statement for Metropolitan's Water Revenue Refunding Bonds, 2009 Series A-1 and Official Statement for Metropolitan's Water Revenue Refunding Bonds, 2012 Series F, received early on August 20, 2012.

At the Finance and Insurance Committee meeting on August 20, we committed to take your comments and any other comments into account in finalizing the offering statements, and we have done so. The Appendix A to Metropolitan's Remarketing and Official Statements is marked to show changes from the August 7, 2012 draft provided to the Board. Many of the changes were included to respond to comments in your August 20 letter.

We appreciate your comments on Appendix A. Board review of Appendix A is an essential component of Metropolitan's process to assure that Remarketing Statements and Official Statements for our financings are up to date and accurately reflect disclosure of material facts relevant to Metropolitan's financial position. Staff has considered these comments and prior comments, in consultation with bond counsel and the financing team, and in each instance made

SDCWA Directors

September 4, 2012

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every effort to confirm facts based on the totality of information then available and refined each Remarketing Statement and Official Statement, then being considered, in response to comments from members of the Board.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Breaux". The signature is fluid and cursive, with a prominent initial "G" and "B".

Gary Breaux

Assistant General Manager/Chief Financial Officer

cc: Board of Directors
S. Bennion
C. Dunn
J. Kightlinger
K. Norris
M. Scully

APPENDIX A

The Metropolitan Water District of Southern California



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INTRODUCTION

This Appendix A provides general information regarding The Metropolitan Water District of Southern California ("Metropolitan"), including information regarding Metropolitan's operations and finances. Statements included or incorporated by reference in this Appendix A constitute "forward-looking statements." Such statements are generally identifiable by the terminology used such as "plan," "project," "expect," "estimate," "budget" or other similar words. The achievement of results or other expectations contained in such forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Actual results may differ from Metropolitan's forecasts. Metropolitan is not obligated to issue any updates or revisions to the forward-looking statements in any event. Metropolitan maintains a website that may include information on programs or projects described in this Appendix A; however, none of the information on Metropolitan's website is incorporated by reference and none of such information is intended to assist investors in making an investment decision or to provide any additional information with respect to the information included in this Appendix A.

Formation and Purpose

Metropolitan is a metropolitan water district created in 1928 under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended (herein referred to as the "Act")). The Act authorizes Metropolitan to: levy property taxes within its service area; establish water rates; impose charges for water standby and service availability; incur general obligation bonded indebtedness and issue revenue bonds, notes and short-term revenue certificates; execute contracts; and exercise the power of eminent domain for the purpose of acquiring property. In addition, Metropolitan's Board of Directors (the "Board") is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan's service area.

Metropolitan's primary purpose is to provide a supplemental supply of water for domestic and municipal uses at wholesale rates to its member public agencies. If additional water is available, such water may be sold for other beneficial uses. Metropolitan serves its member agencies as a water wholesaler and has no retail customers.

The mission of Metropolitan, as promulgated by the Board, is to provide its service area with adequate and reliable supplies of high quality water to meet present and future needs in an environmentally and economically responsible way.

Metropolitan's charges for water sales and availability are fixed by its Board, and are not subject to regulation or approval by the California Public Utilities Commission or any other state or federal agency. Metropolitan imports water from two principal sources: northern California via the Edmund G. Brown California Aqueduct (the "California Aqueduct") of the State Water Project owned by the State of California (the "State") and the Colorado River via the Colorado River Aqueduct owned by Metropolitan.

Member Agencies

Metropolitan is comprised of 26 member public agencies, including 14 cities, 11 municipal water districts, and one county water authority, which collectively serve the residents and businesses of more than 300 cities and numerous unincorporated communities. Member agencies request water from Metropolitan at various delivery points within Metropolitan's system and pay for such water at uniform rates established by the Board for each class of service. Metropolitan's water is a supplemental supply for its member agencies, most of whom have other sources of water. See "METROPOLITAN REVENUES—Principal Customers" for a listing of the ten member agencies with the highest water purchases from Metropolitan during the fiscal year ended June 30, 2012. Metropolitan's member agencies may, from time to time, develop additional sources of water. No member is required to purchase water from Metropolitan, but all member agencies are

required to pay readiness-to-serve charges whether or not they purchase water from Metropolitan. See “METROPOLITAN REVENUES—Rate Structure”, “—Member Agency Purchase Orders” and “—Additional Revenue Components” in this Appendix A.

The following table lists the current 26 member agencies of Metropolitan.

<u>Municipal Water Districts</u>		<u>Cities</u>		<u>County</u> <u>Water Authority</u>
Calleguas	Las Virgenes	Anaheim	Los Angeles	San Diego
Central Basin	Orange County	Beverly Hills	Pasadena	
Eastern	Three Valleys	Burbank	San Fernando	
Foothill	West Basin	Compton	San Marino	
Inland Empire Utilities Agency		Fullerton	Santa Ana	
Upper San Gabriel Valley		Glendale	Santa Monica	
Western of Riverside County		Long Beach	Torrance	
<u>Service Area</u>				

Metropolitan’s service area comprises approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. When Metropolitan began delivering water in 1941, its service area consisted of approximately 625 square miles. Its service area has increased by 4,500 square miles since that time. The expansion is primarily the result of annexation of the service areas of additional member agencies.

Metropolitan estimates that approximately 18 million people lived in Metropolitan’s service area in 2010, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (“SCAG”) and San Diego Association of Governments (“SANDAG”). Population projections prepared by SCAG and SANDAG in 2012 and 2010, as part of their planning process to update regional transportation and land use plans, show expected population growth of about 18 percent in Metropolitan’s service area between 2010 and 2035. SANDAG’s regional agency projections do not incorporate the 2010 Census population estimates and may be revised. The economy of Metropolitan’s service area is exceptionally diverse. As measured in 2011, the economy of Metropolitan’s service area had a gross domestic product larger than all but fifteen nations of the world. Metropolitan provides between 40 and 60 percent of the water used within its service area in any year. For additional economic and demographic information concerning Metropolitan’s service area, see Appendix E – “SELECTED DEMOGRAPHIC AND ECONOMIC INFORMATION FOR METROPOLITAN’S SERVICE AREA.”

The climate in Metropolitan’s service area ranges from moderate temperatures throughout the year in the coastal areas to hot and dry summers in the inland areas. Annual rainfall in an average year is 13 to 15 inches along the coastal area, up to 20 inches in foothill areas and less than 10 inches inland.

METROPOLITAN’S WATER SUPPLY

Metropolitan faces a number of challenges in providing a reliable and high quality water supply for southern California. These include, among others: (1) population growth within the service area; (2) increased competition for low-cost water supplies; (3) variable weather conditions; and (4) increased environmental regulations. Metropolitan’s resources and strategies for meeting these long-term challenges are set forth in its Integrated Water Resources Plan, as updated from time to time. See “—Integrated Water Resources Plan” below.

Metropolitan's principal sources of water are the State Water Project and the Colorado River. Recent court decisions have restricted deliveries from the State Water Project as described below under "—State

Water Project—*Endangered Species Act Considerations*.” In addition, weather conditions have varied significantly, affecting water supplies. Dry conditions persisted in the northern Sierra Nevada watershed for the State Water Project from 2007 through 2009, followed by above-normal precipitation from January 2010 through March 2011. On March 31, 2011, California Governor Jerry Brown proclaimed an end to the statewide drought emergency proclaimed on February 27, 2009 by then-Governor of California Arnold Schwarzenegger. By May 1, 2011, snowpack in the Sierra Nevada had reached 190 percent of normal. Drier conditions returned in late 2011 and early 2012, with California statewide snowpack peaking in mid-April 2012 at 64 percent of normal. On May 1, 2012, statewide snowpack water content was 40 percent of normal.

Supply conditions for the Colorado River have also been impacted by weather conditions. Precipitation in the Upper Colorado River Basin from October 2011 through May 29, 2012 was 73% of normal. Peak snowpack levels in the Upper Colorado River Basin were measured early in the season on March 22, 2012 at 75 percent of normal. The observed April through July 2012 runoff into Lake Powell was 2.1 million acre-feet, or 29 percent of average. In December 2011, Lake Mead's elevation reached 1,133 feet above sea level, or 56 percent full, which is approximately 51 feet higher than observed in November 2010, the lowest elevation recorded since the reservoir was first filled. The reservoir peaked in January 2012 at 1,135 feet. As of August 5, 2012, Lake Mead's elevation was 1,116 feet. Each ten-foot change in Lake Mead's elevation represents approximately 1 million acre-feet of change in storage.

Uncertainties from potential future temperature and precipitation changes in a climate driven by increased concentrations of atmospheric carbon dioxide also present challenges. Areas of concern to California water planners identified by researchers include reduction in Sierra Nevada snowpack; increased intensity and frequency of extreme weather events; and rising sea levels resulting in increased risk of damage from storms, high-tide events, and the erosion of levees and potential cutbacks of deliveries from the State Water Project. While potential impacts from climate change remain subject to study and debate, climate change is among the uncertainties that Metropolitan seeks to address through its planning processes.

Integrated Water Resources Plan

Metropolitan, its member agencies, sub-agencies and groundwater basin managers developed their first Integrated Water Resources Plan (“IRP”), which was adopted by the Board in January 1996 and updated in 2004, as a long-term planning guideline for resources and capital investments. The purpose of the IRP was the development of a portfolio of preferred resources (see “—The Integrated Resources Plan Strategy” below) to meet the water supply reliability and water quality needs for the region in a cost-effective and environmentally sound manner.

On October 12, 2010, Metropolitan's Board adopted an IRP update (the “2010 IRP Update”) as a strategy to set goals and a framework for water resources development. This strategy enables Metropolitan and its member agencies to manage future challenges and changes in California's water conditions and to balance investments with water reliability benefits. The 2010 IRP Update provides an adaptive management approach to address future uncertainty, including uncertainty from climate change. It was formulated with input from member agencies, retail water agencies, and other stakeholders including water and wastewater managers, environmental and business interests and the community. The framework places an emphasis on regional collaboration.

The 2010 IRP Update seeks to provide regional reliability through 2035 by stabilizing Metropolitan's traditional imported water supplies and continuing to develop additional local resources, with an increased

emphasis on regional collaboration. It also advances long-term planning for potential future contingency resources, such as storm water capture and large-scale seawater desalination, in close coordination with Metropolitan's 26 member agencies and other utilities.

The 2010 IRP Update is available on Metropolitan's web site at <http://www.mwdh2o.com/mwdh2o/pages/yourwater/irp/>. Specific projects that may be developed by Metropolitan in connection with the implementation of the IRP will be subject to future Board consideration and approval, as well as environmental and regulatory documentation and compliance. The information set forth on Metropolitan's web site is not incorporated by reference.

The Integrated Resources Plan Strategy

The IRP Strategy identifies a balance of local and imported water resources within Metropolitan's service area. Metropolitan expects that the core resource strategy, uncertainty buffers and foundational actions in the IRP Strategy will be continually reviewed and updated at least every five years to reflect changing demand and supply conditions.

The following paragraphs describe several elements of the IRP Strategy.

State Water Project. The State Water Project is one of Metropolitan's two major sources of water. In addition to municipal and industrial use of this core supply, State Water Project supplies are important for maximizing local groundwater potential and the use of recycled water since State Water Project water has lower salinity content than Colorado River Aqueduct water and can be used to increase groundwater conjunctive use applications. See "METROPOLITAN'S WATER SUPPLY—State Water Project" and "REGIONAL WATER RESOURCES—Local Water Supplies" in this Appendix A.

Colorado River Aqueduct. The Colorado River Aqueduct delivers water from the Colorado River, Metropolitan's original source of supply. Metropolitan has helped to fund and implement farm and irrigation district conservation programs, improvements to river operation facilities, land management programs and water transfers and exchanges through agreements with agricultural water districts in southern California and entities in Arizona and Nevada that use Colorado River water. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct" in this Appendix A.

Water Conservation. Conservation and other water use efficiencies are integral components of Metropolitan's IRP. Metropolitan has invested in conservation programs since the 1980s. Historically, most of the investments have been in water efficient fixtures in the residential sector. Current efforts also focus on outdoor and commercial water use. See "METROPOLITAN'S WATER SUPPLY—Water Conservation" in this Appendix A.

Recycled Water. Reclaimed or recycled municipal and industrial water is not potable, but can be used for landscape irrigation, agriculture, protecting groundwater basins from saltwater intrusion, industrial processes, and recharging local aquifers. Metropolitan offers financial incentives to member agencies for developing economically viable reclamation projects. See "REGIONAL WATER RESOURCES—Local Water Supplies" in this Appendix A.

Conjunctive Use. Conjunctive use is the coordinated use of surface water supplies and groundwater storage. It entails storing surplus imported water during the winter months or wet years in local surface reservoirs and recharging local groundwater basins, then using the stored supplies during dry months and droughts, thus increasing the supply reliability of the region. See "REGIONAL WATER RESOURCES—Local Water Supplies" in this Appendix A.

Water Transfers and Exchanges. Under voluntary water transfer or exchange agreements, agricultural communities using irrigation water may periodically sell some of their water allotments to urban areas. The water may be delivered through existing State Water Project or Colorado River Aqueduct facilities, or may be exchanged for water that is delivered through such facilities. Metropolitan's policy toward potential transfers states that the transfers will be designed to protect and, where feasible, enhance environmental resources and avoid the mining of local groundwater supplies. See "METROPOLITAN'S WATER SUPPLY—Water Transfer, Storage and Exchange Programs" in this Appendix A.

Groundwater Recovery. Natural groundwater reservoirs serve an important function as storage facilities for local and imported water. When groundwater storage becomes contaminated, water agencies have to rely more heavily on imported water supplies. Treatment for polluted groundwater is quite costly and poses environmental challenges. Metropolitan offers financial incentives to help fund member agency groundwater recovery projects. See "REGIONAL WATER RESOURCES—Local Water Supplies" in this Appendix A.

Seawater Desalination. Seawater desalination is the process of removing salts from ocean water to produce potable supplies. It is a potential new local supply that could help increase supply reliability in Metropolitan's service area. Metropolitan offers financial incentives to member agencies for seawater desalination projects through its Seawater Desalination Program. Currently, a number of seawater desalination projects are under development within Metropolitan's service area. See "REGIONAL WATER RESOURCES—Local Water Supplies" and "METROPOLITAN REVENUES—Rate Structure" in this Appendix A.

State Water Project

General. One of Metropolitan's two major sources of water is the State Water Project, which is owned by the State and operated by the California Department of Water Resources ("DWR"). This project transports Feather River water stored in and released from Oroville Dam and unregulated flows diverted directly from the San Francisco Bay/Sacramento-San Joaquin River Delta ("Bay-Delta") south via the California Aqueduct to four delivery points near the northern and eastern boundaries of Metropolitan's service area. The total length of the California Aqueduct is approximately 444 miles.

In 1960, Metropolitan signed a water supply contract (as amended, the "State Water Contract") with DWR. Metropolitan is one of 29 agencies that have long-term contracts for water service from DWR, and is the largest agency in terms of the number of people it serves (approximately 18 million), the share of State Water Project water that it has contracted to receive (approximately 46 percent), and the percentage of total annual payments made to DWR by agencies with State water contracts (approximately 58 percent for 2011). For information regarding Metropolitan's obligations under the State Water Contract, see "METROPOLITAN EXPENDITURES—State Water Contract Obligations" in this Appendix A. Upon expiration of the State Water Contract term (currently in 2035), Metropolitan has the option to continue service under substantially the same terms and conditions.

The State Water Contract, under a 100 percent allocation, provides Metropolitan 1,911,500 acre-feet of water. (An acre-foot is the amount of water that will cover one acre to a depth of one foot and equals approximately 326,000 gallons, which represents the needs of two average families in and around the home for one year.) Water received from the State Water Project by Metropolitan over the ten years from 2002 through 2011, including water from water transfer, groundwater banking and exchange programs delivered through the California Aqueduct, described below under "—Water Transfer, Storage and Exchange Programs," varied from a low of 908,000 acre-feet in calendar year 2009 to a high of 1,800,000 acre-feet in 2004.

For calendar year 2011, DWR's allocation to State Water Project contractors was 80 percent of contracted amounts, reflecting significantly above-normal precipitation over the entire Sierra Nevada range and accumulating snowpack to levels of 185 percent of normal and greater. The 80 percent allocation enabled Metropolitan to take up to 1,529,200 acre-feet of its 1,911,500 acre-foot contractual amount. The 80 percent allocation for 2011 was the highest water supply allocation in five years. In 2011, Metropolitan took delivery of approximately 1.4 million acre-feet to its service area, including supplies from water transfers, exchanges and other deliveries through the California Aqueduct. Additional amounts were stored and exchanged with Metropolitan's out of service area storage and exchange partners. See "—Water Transfer, Storage and Exchange Programs" and "—Storage Capacity and Water in Storage" below.

For calendar year 2012, DWR's initial allocation estimate to State Water Project contractors was 60 percent of contracted amounts. This estimate was reduced to 50 percent of contracted amounts on February 21, 2012 and adjusted upward to 60 percent of contracted amounts by April 16, 2012. The allocation was increased again on May 23, 2012, to 65 percent of contracted amounts due to April's wetter-than-usual weather. For Metropolitan, the increased 2012 allocation will provide 1,242,475 acre-feet, or 65 percent of its 1,911,500-acre-foot contractual amount. In addition, Metropolitan began 2012 with 200,000 acre-feet of carryover supplies from prior years in San Luis Reservoir, a joint use facility of the State Water Project and federal Central Valley Project, all of which can be drawn in 2012.

Endangered Species Act Considerations

General. The listing of several fish species as threatened or endangered under the federal or California Endangered Species Acts (respectively, the "Federal ESA" and the "California ESA" and, collectively, the "ESAs") have adversely impacted State Water Project operations and limited the flexibility of the State Water Project. Currently, five species (the winter-run and spring-run Chinook salmon, Delta smelt, North American green sturgeon and Central Valley steelhead) are listed under the ESAs. In addition, on June 25, 2009, the California Fish and Game Commission declared the longfin smelt a threatened species under the California ESA.

The Federal ESA requires that before any federal agency authorizes funds or carries out an action it must consult with the appropriate federal fishery agency to determine whether the action would jeopardize the continued existence of any threatened or endangered species, or adversely modify habitat critical to the species' needs. The result of the consultation is known as a "biological opinion." In the biological opinion the federal fishery agency determines whether the action would cause jeopardy to a threatened or endangered species or adverse modification to critical habitat and recommends reasonable and prudent alternatives or measures that would allow the action to proceed without causing jeopardy or adverse modification. The biological opinion also includes an "incidental take statement." The incidental take statement allows the action to go forward even though it will result in some level of "take," including harming or killing some members of the species, incidental to the agency action, provided that the agency action does not jeopardize the continued existence of any threatened or endangered species and complies with reasonable mitigation and minimization measures recommended by the federal fishery agency.

In 2004 and 2005, the United States Fish and Wildlife Service ("USFWS") and National Marine Fisheries Service issued biological opinions and incidental take statements governing the coordinated operations of the State Water Project and the federal Central Valley Project with respect to the Delta smelt, the winter-run and spring-run Chinook salmon and the Central Valley steelhead. In July 2006, the Bureau of Reclamation reinitiated consultation with the USFWS and National Marine Fisheries Service with respect to the 2004 and 2005 biological opinions (with the addition of the North American green sturgeon, which was listed in April 2006) following the filing of legal challenges to those biological opinions and incidental take statements described under "*Federal ESA Litigation*" below. Under the Federal ESA, critical habitat must also be designated for each listed species. Critical habitat has been designated for each of the currently listed species.

Federal ESA Litigation. Litigation filed by several environmental interest groups (*NRDC v. Kempthorne*; and *Pacific Coast Federation of Fishermen's Associations v. Gutierrez*) in the United States District Court for the Eastern District of California alleged that the 2004 and 2005 biological opinions and incidental take statements inadequately analyzed impacts on listed species under the Federal ESA.

On May 25, 2007, Federal District Judge Wanger issued a decision on summary judgment in *NRDC v. Kempthorne*, finding the USFWS biological opinion for Delta smelt to be invalid. The USFWS released a new biological opinion on the impacts of the State Water Project and Central Valley Project on Delta smelt on December 15, 2008. Metropolitan, the San Luis & Delta Mendota Water Authority, Westlands Water District, Kern County Water Agency, Coalition for a Sustainable Delta and State Water Contractors, a California nonprofit corporation formed by agencies contracting with DWR for water from the State Water Project (the "State Water Contractors"), the Family Farm Alliance and the Pacific Legal Foundation on behalf of several owners of small farms in California's Central Valley filed separate lawsuits in federal district court challenging the biological opinion, which the federal court consolidated under the caption *Delta Smelt Consolidated Cases*.

On December 14, 2010, Judge Wanger issued a decision on summary judgment finding that there were major scientific and legal flaws in the Delta smelt biological opinion. The court found that some but not all of the restrictions on project operations contained in the 2008 Delta smelt biological opinion were arbitrary, capricious and unlawful. On May 18, 2011, Judge Wanger issued a final amended judgment directing the USFWS to complete a new draft biological opinion by October 1, 2011, and a final biological opinion with environmental documentation by December 1, 2013. Later stipulations and orders changed the October 1, 2011 due date for a draft biological opinion to December 14, 2011. A draft biological opinion was issued on December 14, 2011. The draft biological opinion deferred specification of a reasonable and prudent alternative and an incidental take statement pending completion of environmental impact review under the National Environmental Policy Act ("NEPA"). The federal defendants and environmental intervenors appealed the final judgment invalidating the 2008 Delta smelt biological opinion to the U.S. Court of Appeals for the Ninth Circuit. State Water Project and Central Valley Project contractor plaintiffs, including Metropolitan, have cross-appealed from the final judgment. Those appeals and cross-appeals are scheduled for hearing on September 10, 2012.

On February 25, 2011, the federal court approved a settlement agreement modifying biological opinion restrictions on Old and Middle River flows that would have otherwise applied in spring 2011. The settlement agreement expired on June 30, 2011. State Water Project and Central Valley Project contractors also moved to enjoin certain fall salinity requirements in the biological opinion that were set to become operable in September and October 2011. After an evidentiary hearing on the water contractors' motion in July 2011, Judge Wanger issued a decision on August 31, 2011, modifying the fall salinity related requirements in the biological opinion. The effect of the injunction was to reduce water supply impacts from the biological opinion's fall salinity requirements. The federal defendants and the environmental intervenors appealed the injunction on fall salinity requirements but the federal defendants subsequently dismissed their appeal in October 2011. The environmental intervenors' appeal to the Ninth Circuit on the fall salinity requirement injunction is scheduled for hearing on September 10, 2012. The State Water Project and Central Valley Project contractors have moved to dismiss the environmental intervenors' appeal of the fall salinity requirement on the ground that the salinity requirement for 2011 has expired, and is therefore moot.

On April 16, 2008, in *Pacific Coast Federation of Fishermen's Associations v. Gutierrez*, the court invalidated the 2004 National Marine Fisheries Service's biological opinion for the salmon and other fish species that spawn in rivers flowing into the Bay-Delta. Among other things, the court found that the no-jeopardy conclusions in the biological opinion were inconsistent with some of the factual findings in the biological opinion; that the biological opinion failed to adequately address the impacts of State Water Project and Central Valley Project operations on critical habitat and that there was a failure to consider how climate change and global warming might affect the impacts of the projects on salmonid species.

The National Marine Fisheries Service released a new biological opinion for salmonid species to replace the 2004 biological opinion on June 4, 2009. The 2009 salmonid species biological opinion contains additional restrictions on State Water Project and Central Valley Project operations. The National Marine Fisheries Service calculated that these restrictions will reduce the amount of water the State Water Project and Central Valley Project combined will be able to export from the Bay-Delta by 5 to 7 percent. DWR had estimated a 10 percent average water loss under this biological opinion. See “—*State Water Project Operational Constraints*” below for the estimated impact to Metropolitan’s water supply. Six lawsuits were filed challenging the 2009 salmon biological opinion. These various lawsuits have been brought by the San Luis & Delta Mendota Water Authority, Westlands Water District, Stockton East Water District, Oakdale Irrigation District, Kern County Water Agency, the State Water Contractors and Metropolitan. The court consolidated the cases under the caption *Consolidated Salmon Cases*.

On May 25, 2010, the court granted the plaintiffs’ request for preliminary injunction in the *Consolidated Salmon Cases*, restraining enforcement of two requirements under the salmon biological opinion that limit exported water during the spring months based on San Joaquin River flows into the Bay-Delta and reverse flows on the Old and Middle Rivers. Hearings on motions for summary judgment in the *Consolidated Salmon Cases* were held on December 16, 2010. On September 20, 2011, Judge Wanger issued a decision on summary judgment, finding that the salmon biological opinion was flawed, and that some but not all of the project restrictions in the biological opinion were arbitrary and capricious. On December 12, 2011, Judge O’Neill (who was assigned to this case following Judge Wanger’s retirement) issued a final judgment in the *Consolidated Salmon Cases*. The final judgment remands the 2009 salmon biological opinion to the National Marine Fisheries Service, and directs that a new draft salmon biological opinion be issued by October 1, 2014, and that a final biological opinion be issued by February 1, 2016, after completion of environmental impact review under NEPA. On January 19, 2012, Judge O’Neill approved a joint stipulation of the parties that specifies how to comply with one of the salmon biological opinion restrictions that applies to water project operations in April and May of 2012. In January and February 2012, the federal defendants and environmental intervenors filed appeals of the final judgment in the *Consolidated Salmon Cases*, and the State Water Project and Central Valley Project contractors filed cross-appeals. Those appeals and cross-appeals are now pending in the Ninth Circuit.

On November 13, 2009, the Center for Biological Diversity filed separate lawsuits challenging the USFWS’ failure to respond to a petition to change the Delta smelt’s federal status from threatened to endangered and the USFWS’ denial of federal listing for the longfin smelt. On April 2, 2010, the USFWS issued a finding that uplisting the Delta smelt was warranted but precluded by the need to devote resources to higher-priority matters. This “warranted but precluded” finding did not change the regulatory restrictions applicable to Delta smelt. For the longfin smelt litigation, a settlement agreement was approved on February 2, 2011. Under the agreement, the USFWS agreed to complete a range-wide status review of the longfin smelt and consider whether the Bay-Delta longfin smelt population, or any other longfin smelt population from California to Alaska, qualifies as a "distinct population" that warrants federal protection. On April 2, 2012, the USFWS issued its finding that the Bay-Delta longfin smelt population warrants protection under the ESA but is precluded from listing as a threatened or endangered species by the need to address other higher priority listing actions. The review identified several threats facing longfin smelt in the Bay-Delta, including reduced freshwater Bay-Delta outflows. The finding includes the determination that the Bay-Delta longfin smelt will be added to the list of candidates for ESA protection, where its status will be reviewed annually.

California ESA Litigation. In addition to the litigation under the Federal ESA, other environmental groups sued DWR on October 4, 2006 in the Superior Court of the State of California for Alameda County alleging that DWR was “taking” listed species without authorization under the California ESA. This litigation (*Watershed Enforcers, a project of the California Sportfishing Protection Alliance v. California Department of Water Resources*) requested that DWR be mandated to either cease operation of the State Water Project pumps, which deliver water to the California Aqueduct, in a manner that results in such

“taking” of listed species or obtain authorization for such “taking” under the California ESA. On April 18, 2007, the Alameda County Superior Court issued its Statement of Decision finding that DWR was illegally “taking” listed fish through operation of the State Water Project export facilities. The Superior Court ordered DWR to “cease and desist from further operation” of those facilities within 60 days unless it obtained take authorization from the California Department of Fish and Game.

DWR appealed the Alameda County Superior Court’s order on May 7, 2007. This appeal stayed the order pending the outcome of the appeal. The Court of Appeal stayed processing of the appeal in 2009 to allow time for DWR to obtain incidental take authorization for the Delta smelt and salmon under the California ESA, based on the consistency of the federal biological opinions with California ESA requirements (“Consistency Determinations”). After the California Department of Fish & Game issued the Consistency Determinations under the California ESA, authorizing the incidental take of both Delta smelt and salmon, appellants DWR and State Water Contractors dismissed their appeals of the *Watershed Enforcers* decision. The Court of Appeal subsequently issued a decision finding that DWR was a “person” under the California ESA and subject to its take prohibitions, which was the only issue left in the case. The State Water Contractors and Kern County Water Agency have filed suit in state court challenging the Consistency Determinations under the California ESA that have been issued for both Delta smelt and salmon. Those lawsuits challenging the Consistency Determinations are pending. The parties are continuing discussions of adjustments to the incidental take authorizations in light of the summary judgment ruling in the *Delta Smelt Consolidated Cases* and the *Consolidated Salmon Cases*, discussed under the heading “—Federal ESA Litigation” above.

The California Fish and Game Commission listed the longfin smelt as a threatened species under the California ESA on June 25, 2009. On February 23, 2009, in anticipation of the listing action, the California Department of Fish and Game issued a California ESA section 2081 incidental take permit to DWR authorizing the incidental take of longfin smelt by the State Water Project. This permit authorizes continued operation of the State Water Project under the conditions specified in the section 2081 permit. The State Water Contractors filed suit against the California Department of Fish and Game on March 25, 2009, alleging that the export restrictions imposed by the section 2081 permit have no reasonable relationship to any harm to longfin smelt caused by State Water Project operations, are arbitrary and capricious and are not supported by the best available science. The lawsuit is pending and the administrative record for the cases has been completed.

State Water Project Operational Constraints. DWR has altered the operations of the State Water Project to accommodate species of fish listed under the ESAs. These changes in project operations have adversely affected State Water Project deliveries. The impact on total State Water Project deliveries attributable to the Delta smelt and salmonid species biological opinions combined is estimated to be one million acre-feet in an average year, reducing State Water Project deliveries from approximately 3.3 million acre-feet to approximately 2.3 million acre-feet for the year under average hydrology, and are estimated to range from 0.3 million acre-feet during critically dry years to 1.3 million acre-feet in above normal water years. State Water Project deliveries to contractors were reduced by approximately 285,000 acre-feet of water in calendar year 2011 as a result of pumping restrictions, with 135,000 acre-feet of export reductions in January and February, and 150,000 acre-feet in the fall. Despite operational restrictions in 2011, high flows from above-normal precipitation in late 2010 and early 2011 reaching the Bay-Delta resulted in above average storage levels remaining in Lake Oroville through July 2012.

Operational constraints likely will continue until long-term solutions to the problems in the Bay-Delta are identified and implemented. The Delta Vision process, established by then-Governor Schwarzenegger, was aimed at identifying long-term solutions to the conflicts in the Bay-Delta, including natural resource, infrastructure, land use and governance issues. In addition, State and federal resource agencies and various environmental and water user entities are currently engaged in the development of the Bay-Delta Conservation Plan, which is aimed at addressing ecosystem needs and securing long-term

operating permits for the State Water Project, and includes the Delta Habitat Conservation and Conveyance Program (DHCCP) (together, the “BDCP”). The DHCCP’s current efforts consist of the preparation of the environmental documentation and preliminary engineering design for Bay-Delta water conveyance and related habitat conservation measures under the BDCP. The Delta Vision process and the BDCP are discussed further under “—*Bay-Delta Regulatory and Planning Activities*” below.

Other issues, such as the decline of some fish populations in the Bay-Delta and surrounding regions and certain operational actions in the Bay-Delta, may significantly reduce Metropolitan’s water supply from the Bay-Delta. State Water Project operational requirements may be further modified under new biological opinions for listed species under the Federal ESA or by the California Department of Fish and Game’s issuance of incidental take authorizations under the California ESA. Biological opinions or incidental take authorizations under the Federal ESA and California ESA might further adversely affect State Water Project and Central Valley Project operations. Additionally, new litigation, listings of additional species or new regulatory requirements could further adversely affect State Water Project operations in the future by requiring additional export reductions, releases of additional water from storage or other operational changes impacting water supply operations. Metropolitan cannot predict the ultimate outcome of any of the litigation or regulatory processes described above but believes they could have a materially adverse impact on the operation of the State Water Project pumps, Metropolitan’s State Water Project supplies and Metropolitan’s water reserves.

“Area of Origin” Litigation. Four State Water Project contractors located north of the State Water Project’s Bay-Delta pumping plant filed litigation against DWR on July 17, 2008, asserting that since they are located in the “area of origin” of State Water Project water they are entitled to receive their entire contract amount before any water is delivered to contractors south of the Bay-Delta. If the plaintiffs are successful in this litigation, State Water Project water available to Metropolitan in a drought period could be reduced by approximately 25,000 acre-feet each year of a multi-year drought or by as much as 40,000 acre-feet in an exceedingly dry year. Metropolitan and twelve other State Water Project contractors located south of the Bay-Delta filed motions to intervene in this litigation, which were granted on February 25, 2009. In May 2012, the parties reached an agreement in principle that plaintiffs will dismiss the action with prejudice and agree to certain limitations on asserting area of origin arguments in the future; in return DWR and the intervenors will agree to operational changes that will increase the reliability of plaintiffs’ SWP supplies at little or minimal cost to other SWP water contractors. The parties are drafting a formal settlement agreement.

Bay-Delta Regulatory and Planning Activities. The State Water Resources Control Board (“SWRCB”) is the agency responsible for setting water quality standards and administering water rights throughout California. Decisions of the SWRCB can affect the availability of water to Metropolitan and other users of State Water Project water. The SWRCB exercises its regulatory authority over the Bay-Delta by means of public proceedings leading to regulations and decisions. These include the Bay-Delta Water Quality Control Plan (“WQCP”), which establishes the water quality objectives and proposed flow regime of the estuary, and water rights decisions, which assign responsibility for implementing the objectives of the WQCP to users throughout the system by adjusting their respective water rights. The SWRCB is required by law to periodically review its WQCP to ensure that it meets the changing needs of this complex system.

Since 2000, SWRCB’s Water Rights Decision 1641 (“D-1641”) has governed the State Water Project’s ability to export water from the Bay-Delta for delivery to Metropolitan and other agencies receiving water from the State Water Project. D-1641 allocated responsibility for meeting flow requirements and salinity and other water quality objectives established earlier by the WQCP. The SWRCB also identified additional issues to review, which could result in future changes in water quality objectives and flows that could affect exports of water from the State Water Project. Currently, the SWRCB is reviewing salinity objectives in the Bay-Delta intended to protect Bay-Delta farming and inflow requirements upstream of the Delta to protect aquatic species.

The CALFED Bay-Delta Program was a collaborative effort among 25 State and federal agencies to improve water supplies in California and the health of the Bay-Delta watershed. On August 28, 2000, the federal government and the State issued a Record of Decision (“ROD”) and related documents approving the final programmatic environmental documentation for the CALFED Bay-Delta Program. The Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA) was challenged in three separate cases, but ultimately upheld by the California Supreme Court in June 2008.

The CALFED Bay-Delta Program resulted in an investment of \$3 billion on a variety of projects and programs to begin addressing the Bay-Delta’s water supply, water quality, ecosystem, and levee stability problems. To guide future development of and governance for the CALFED Bay-Delta Program and identify a strategy for managing the Bay-Delta as a sustainable resource, in September 2006, then-Governor Schwarzenegger established by Executive Order a Delta Vision process. The Delta Vision process resulted in creation of a Delta Vision Blue Ribbon Task Force that issued its Delta Vision Strategic Plan (the “Strategic Plan”) on October 17, 2008, providing its recommendations for long-term sustainable management of the Bay-Delta. These recommendations included completing the BDCP and associated environmental assessments to permit ecosystem revitalization and water conveyance improvements, identifying and reducing stressors to the Bay-Delta ecosystem, strengthening levees, increasing emergency preparedness, continuing funding for the CALFED ecosystem restoration program, updating Bay-Delta regulatory flow and water quality standards to protect beneficial uses of water and working with the State Legislature on a comprehensive water bond package to fund Bay-Delta infrastructure projects.

On November 4, 2009, the State Legislature authorized an \$11.1 billion water bond measure that includes over \$2 billion for Bay-Delta ecosystem restoration as well as \$3 billion for new water storage and additional funds for water recycling, drought relief, conservation and watershed protection projects. The bond measure is subject to voter authorization and was scheduled to be included on the November 2010 ballot; however, in August 2010 the Legislature postponed the bond election to 2012. In January 2012, Governor Jerry Brown issued a statement which supported removing the bond measure from the 2012 ballot to place it on the 2014 ballot. Delaying the bond election did not impact other parts of the 2009 water legislation. Related legislation created a new oversight council for the Bay-Delta, the Delta Stewardship Council, and directs that the Bay-Delta be managed with dual goals of water supply reliability and ecosystem protection, sets a statewide conservation target for urban per capita water use of 20 percent reductions by 2020 (with credits for existing conservation), provides funding for increased enforcement of illegal water diversions and establishes a statewide groundwater monitoring program. The Council, formed on February 3, 2010, is CALFED’s successor agency and was directed to adopt and oversee implementation of a comprehensive management plan for the Bay-Delta. Following public review in mid-2012, the plan is scheduled to be finalized by late 2012.

The working draft BDCP was completed in November 2010 and a full draft BDCP and the associated environmental impact statement and report are anticipated in 2013. On December 15, 2010, California and federal agencies affirmed their support for the BDCP process to restore the Bay-Delta ecosystem and regain water supply reliability for Californians. Separate reports from the California Natural Resources Agency and from President Obama’s Administration were concurrently released in support of the BDCP process and water conveyance improvements. The planning, environmental documentation and preliminary engineering design for the BDCP are being prepared pursuant to the Delta Habitat Conservation and Conveyance Program Memorandum of Agreement (“MOA”). The parties to the MOA are DWR, the Bureau of Reclamation, the State and Federal Contractors Water Agency, Metropolitan, Kern County Water Agency, State Water Contractors, San Luis & Delta Mendota Water Authority, Westlands Water District and Santa Clara Valley Water District. The final planning and environmental documents are scheduled to be completed in spring 2013. On July 25, 2012, Governor Jerry Brown and Secretary of the Interior Ken Salazar announced key elements to advance the BDCP planning process, including north Bay-Delta water diversion facilities with a total capacity of 9,000 cubic-feet per second (“cfs”), two tunnels sized to minimize energy use during operations, ~~and~~ a “decision tree” process for unresolved issues such as fall and spring outflows-

~~and a commitment by Metropolitan and the Santa Clara Valley Water District to surpass the 2009 Delta Reform Act water savings targets by 700,000 af per year based on predicted future demands.~~

Metropolitan, along with other State and federal water contractors, has urged action to address water quality concerns with respect to both the aquatic health of the Bay-Delta and drinking water quality. On December 9, 2010, the Central Valley Regional Water Quality Control Board ("Regional Board") approved a National Pollutant Discharge Elimination System ("NPDES") permit for the Sacramento Regional County Sanitation District ("Sanitation District") setting water-quality based requirements for the Sanitation District's wastewater treatment plant that will require advanced treatment upgrades for the Sanitation District's wastewater facility. The Sanitation District's treatment plant is the largest wastewater discharger into the Bay-Delta. The treatment plant provides only a secondary level of treatment and discharges nutrients, pathogens, and total organic carbon into the Bay-Delta water supply. The treatment plant's discharge of nitrogen, particularly ammonia, has been shown to be altering the food chain in the estuary to the detriment of Delta smelt and other native species. The NPDES permit calls for a significant reduction of the nitrogen and particularly ammonia discharge which will require full nitrification and denitrification treatment by 2020, as well as tertiary filtration treatment to meet pathogen removal requirements. The NPDES permit also includes additional permit limits and monitoring requirements for other water quality constituents, including toxic contaminants.

The Sanitation District petitioned the SWRCB for review of the NPDES permit. The SWRCB issued a draft order on May 14, 2012, largely upholding the Regional Board's determinations, and held a workshop on the proposed order on July 18, 2012. Although the appeal before the SWRCB remains pending, on December 30, 2011, the Sanitation District filed a lawsuit in Sacramento Superior Court against the Regional Board and SWRCB seeking to overturn and relax the NPDES permit. Metropolitan and other water agencies that participated in the NPDES permitting process have intervened in the superior court case. In a stipulation between the Sanitation District and the Regional Board, the superior court stayed all further proceedings in the case until after the SWRCB issues its final decision on the permit. The stay also extends the permit compliance deadline through the duration of the stay.

Metropolitan, other urban State Water Contractor agencies and the Contra Costa Water District earlier brought a successful CEQA challenge in response to significant, unmitigated water quality impacts that would occur from a planned expansion of the Sanitation District's treatment plant. The Sanitation District appealed the trial court ruling and the case remains pending in the Third District Court of Appeal awaiting oral argument.

California Water Impact Network Litigation. On September 3, 2010, the California Water Impact Network and two other non-profit organizations filed a petition for writ of mandate and for declaratory and injunctive relief in Sacramento Superior Court against the SWRCB and DWR. The petition alleges that by permitting and carrying out the export of large volumes of water from the Delta through the State Water Project, the SWRCB and DWR have failed to protect public trust fishery resources in the Delta; have been diverting water from the Bay-Delta wastefully and unreasonably in violation of the prohibition against waste and unreasonable use in the California Constitution; and have failed to enforce and comply with water quality and beneficial use standards in D-1641, the 1995 SWRCB Water Quality Control Plan, and the Porter-Cologne Act. Among the relief sought in the petition is an injunction against Bay-Delta exports by the State Water Project pending compliance with the various laws and administrative orders that are alleged to have been violated. The State Water Contractors filed a motion to intervene in this action, which was granted on March 25, 2011. The court has ordered the plaintiffs to include the Bureau of Reclamation as a party. In response, the Bureau of Reclamation has asserted that federal sovereign immunity bars their inclusion in the state court action. If the court determines that the Bureau of Reclamation is an indispensable party, the lawsuit, or portions of it, may be dismissed.

Monterey Agreement Litigation. On September 15, 2000, the Third District Court of Appeal for the State of California issued its decision in *Planning and Conservation League; Citizens Planning Association of Santa Barbara County and Plumas County Flood Control District v. California Department of Water Resources and Central Coast Water Authority*. This case was an appeal of a challenge to the adequacy of the environmental documentation prepared with respect to certain amendments to the State Water Contract (the "Monterey Agreement") which reflects the settlement of certain disputes regarding the allocation of State Water Project water. The Court of Appeal held that the environmental documentation was defective in failing to analyze the environmental effects of the Monterey Agreement's elimination of the permanent shortage provisions of the State Water Contract. The parties negotiated a settlement agreement in the fall of 2002, which allows continued operation of the State Water Project under the Monterey Agreement principles while a new EIR was prepared. DWR completed the final EIR and concluded the remedial CEQA review for the project on May 4, 2010. Following DWR's completion of the EIR, three new lawsuits were filed challenging the project. Central Delta Water Agency, South Delta Water Agency, California Water Impact Network, California Sportfishing Protection Alliance, and the Center For Biological Diversity filed a lawsuit against DWR in Sacramento County Superior Court challenging the validity of the EIR under CEQA and the validity of underlying agreements under a reverse validation action (the "*Central Delta I*" case). These same plaintiffs filed a reverse validation lawsuit against the Kern County Water Agency in Kern County Superior Court ("*Central Delta II*"). This lawsuit targets a transfer of land from Kern County Water Agency to the Kern Water Bank, which was completed as part of the original Monterey Amendments. The third lawsuit is an EIR challenge brought by Rosedale-Rio Bravo Water Storage District and Buena Vista Water Storage District ("*Rosedale-Rio Bravo*") against DWR in Kern County Superior Court. The two Kern County cases have been transferred to Sacramento Superior Court and the three cases consolidated for trial. No schedule has been issued by the court. Any adverse impact of this litigation on Metropolitan's State Water Project supplies cannot be determined at this time.

Colorado River Aqueduct

General. The Colorado River was Metropolitan's original source of water after Metropolitan's establishment in 1928. Metropolitan has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. Water from the Colorado River and its tributaries is also available to other users in California, as well as users in the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming (the "Colorado River Basin States"), resulting in both competition and the need for cooperation among these holders of Colorado River entitlements. In addition, under a 1944 treaty, Mexico has an allotment of 1.5 million acre-feet of Colorado River water annually except in the event of extraordinary drought, or serious accident to the delivery system in the United States, when the water allotted to Mexico would be curtailed. Mexico also can schedule delivery of an additional 200,000 acre-feet of Colorado River water per year if water is available in excess of the requirements in the United States and the 1.5 million acre-feet allotted to Mexico.

The Colorado River Aqueduct, which is owned and operated by Metropolitan, transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County. After deducting for conveyance losses and considering maintenance requirements, up to 1.25 million acre-feet of water a year may be conveyed through the Colorado River Aqueduct to Metropolitan's member agencies, subject to availability of Colorado River water for delivery to Metropolitan as described below.

California is apportioned the use of 4.4 million acre-feet of water from the Colorado River each year plus one-half of any surplus that may be available for use collectively in Arizona, California and Nevada. In addition, California has historically been allowed to use Colorado River water apportioned to but not used by Arizona or Nevada when such supplies have been requested for use in California. Under the 1931 priority system that has formed the basis for the distribution of Colorado River water made available to California, Metropolitan holds the fourth priority right to 550,000 acre-feet per year. This is the last priority within California's basic apportionment. In addition, Metropolitan holds the fifth priority right to 662,000 acre-feet of water, which is in excess of California's basic apportionment. See the table "PRIORITIES UNDER THE

1931 CALIFORNIA SEVEN-PARTY AGREEMENT” below. Until 2003, Metropolitan had been able to take full advantage of its fifth priority right as a result of the availability of surplus water and apportioned but unused water. However, during the 1990s Arizona and Nevada increased their use of water from the Colorado River, utilizing their respective basic apportionments by 2002 and significantly reducing unused apportionment available for California. In addition, a severe drought in the Colorado River Basin reduced storage in system reservoirs, such that Metropolitan stopped taking surplus deliveries in 2003 in an effort to mitigate the effects of the drought. Prior to 2003, Metropolitan could divert over 1.2 million acre-feet in any year, but since that time, Metropolitan’s net diversions of Colorado River water have been limited to a low of nearly 633,000 acre-feet in 2006 and a high of approximately 1,105,232 acre-feet in 2009. Average annual net deliveries for 2003 through 2011 were approximately 830,300 acre-feet, with annual volumes dependent primarily on programs to augment supplies, including transfers of conserved water from agriculture. Metropolitan’s Colorado River supply was about 885,000 acre-feet in 2011, of which approximately 699,000 acre-feet was delivered through the Colorado River Aqueduct and about 186,000 acre-feet of intentionally-created surplus water was stored in Lake Mead. See “—*Quantification Settlement Agreement*” and “—*Interim Surplus Guidelines*” below.

PRIORITIES UNDER THE 1931 CALIFORNIA SEVEN-PARTY AGREEMENT⁽¹⁾

Priority	Description	Acre-Feet Annually
1	Palo Verde Irrigation District gross area of 104,500 acres of land in the Palo Verde Valley	
2	Yuma Project in California not exceeding a gross area of 25,000 acres in California	3,850,000
3(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys ⁽²⁾ to be served by All-American Canal	
3(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	
4	Metropolitan Water District of Southern California for use on the coastal plain	550,000
	SUBTOTAL	4,400,000
5(a)	Metropolitan Water District of Southern California for use on the coastal plain	550,000
5(b)	Metropolitan Water District of Southern California for use on the coastal plain ⁽³⁾	112,000
6(a)	Imperial Irrigation District and other lands in Imperial and Coachella Valleys to be served by the All-American Canal	
6(b)	Palo Verde Irrigation District - 16,000 acres of land on the Lower Palo Verde Mesa	300,000
	TOTAL	5,362,000
7	Agricultural use in the Colorado River Basin in California	Remaining surplus

Source: Metropolitan.

- (1) Agreement dated August 18, 1931, among Palo Verde Irrigation District, Imperial Irrigation District, Coachella Valley County Water District, Metropolitan, the City of Los Angeles, the City of San Diego and the County of San Diego. These priorities were memorialized in the agencies' respective water delivery contracts with the Secretary of the Interior.
- (2) The Coachella Valley Water District serves Coachella Valley.
- (3) In 1946, the City of San Diego, the San Diego County Water Authority, Metropolitan and the Secretary of the Interior entered into a contract that merged and added the City and County of San Diego's rights to storage and delivery of Colorado River water to the rights of Metropolitan.

Metropolitan has taken steps to augment its share of Colorado River water through agreements with other agencies that have rights to use such water. Under a 1988 water conservation agreement (the "1988 Conservation Agreement") between Metropolitan and the Imperial Irrigation District ("IID"), Metropolitan provided funding for IID to construct and operate a number of conservation projects that are currently conserving up to 105,000 acre-feet of water per year that is provided to Metropolitan. Under the October 2003 Quantification Settlement Agreement and related agreements, Metropolitan, at the request of Coachella Valley Water District ("CVWD"), forgoes up to 20,000 acre-feet of this water each year for diversion by CVWD. See "*Quantification Settlement Agreement*" below. In 2008, 2009 and 2010 CVWD's requests were for 16,000, 12,000 and 8,000 acre-feet respectively, leaving 89,000 acre-feet in 2008, 93,000 acre-feet

in 2009 and 97,000 acre-feet in 2010 for Metropolitan. In 2011, 103,940 acre-feet were conserved under the 1988 Conservation Agreement, of which 4,000 acre-feet were requested by CVWD.

In 1992, Metropolitan entered into an agreement with the Central Arizona Water Conservation District (“CAWCD”) to demonstrate the feasibility of CAWCD storing Colorado River water in central Arizona for the benefit of an entity outside of the State of Arizona. Pursuant to this agreement, CAWCD created 80,909 acre-feet of long-term storage credits that may be recovered by CAWCD for Metropolitan. Metropolitan, the Arizona Water Banking Authority, and CAWCD executed an amended agreement for recovery of these storage credits in December 2007. All 80,909 acre-feet were recovered and delivered to Metropolitan between 2007 and 2010.

Metropolitan and the Palo Verde Irrigation District (“PVID”) signed the program agreement for a Land Management, Crop Rotation and Water Supply Program in August 2004. This program provides up to 133,000 acre-feet of water to be available to Metropolitan in certain years. The term of the program is 35 years. Fallowing of approximately 20,000 acres of land began on January 1, 2005. In March 2009, Metropolitan and PVID entered into a supplemental fallowing program within PVID that provided for the fallowing of additional acreage in 2009 and 2010. In calendar years 2009 and 2010, respectively, 24,100 acre-feet and 32,300 acre-feet of water were saved and made available to Metropolitan under the supplemental program. The following table shows annual volumes of water saved and made available to Metropolitan:

WATER AVAILABLE FROM PVID LAND MANAGEMENT, CROP ROTATION, AND WATER SUPPLY PROGRAM

<u>Calendar Year</u>	<u>Volume (acre-feet)</u>
2005	108,700
2006	105,000
2007	72,300
2008	94,300
2009*	144,300
2010*	148,600
2011	122,200

Source: Metropolitan.

* Includes water from the supplemental fallowing program that provided for fallowing of additional acreage in 2009 and 2010.

In May 2008, Metropolitan provided \$28.7 million to join the CAWCD and the Southern Nevada Water Authority (“SNWA”) in funding the Bureau of Reclamation’s construction of an 8,000 acre-foot off-stream regulating reservoir near Drop 2 of the All-American Canal in Imperial County (officially renamed the Warren H. Brock Reservoir). Construction was completed in October 2010. The Warren H. Brock Reservoir is expected to conserve about 70,000 acre-feet of water per year by capturing and storing otherwise non-storable water flow. The Bureau of Reclamation has refunded to Metropolitan \$2.43 million in unused contingency funds. In return for its funding, Metropolitan received 100,000 acre-feet of water that is stored in Lake Mead, with the ability to deliver up to 40,000 acre-feet of water in any one year. Besides the additional water supply, the new reservoir adds to the flexibility of Colorado River operations.

In September 2009, Metropolitan authorized participation with SNWA, the Colorado River Commission of Nevada, the CAWCD and the Bureau of Reclamation in the pilot operation of the Yuma Desalting Plant. The Bureau of Reclamation concluded the pilot operation of the Yuma Desalting Plant in March 2011. Metropolitan’s contribution for the funding agreement was \$8,395,313. Metropolitan’s yield from the pilot run of the project was 24,397 acre-feet.

Quantification Settlement Agreement. The Quantification Settlement Agreement (“QSA”), executed by CVWD, IID and Metropolitan in October 2003, establishes Colorado River water use limits for IID and CVWD, provides for specific acquisitions of conserved water and water supply arrangements for up to 75 years, and restored the opportunity for Metropolitan to receive any “special surplus water” under the Interim Surplus Guidelines. See “—*Interim Surplus Guidelines*” below. The QSA also allows Metropolitan to enter into other cooperative Colorado River supply programs. Related agreements modify existing conservation and cooperative water supply agreements consistent with the QSA, and set aside several disputes among California’s Colorado River water agencies.

Specific programs under the QSA include lining portions of the All-American and Coachella Canals, which conserve approximately 96,000 acre-feet annually. As a result, about 80,000 acre-feet of conserved water is delivered to SDCWA by exchange with Metropolitan. Metropolitan also takes delivery of 16,000 acre-feet annually that will be made available for the benefit of the La Jolla, Pala, Pauma, Rincon and San Pasqual Bands of Mission Indians, the San Luis Rey River Indian Water Authority, the City of Escondido and the Vista Irrigation District, upon completion of a water rights settlement, expected in 2012. An amendment to the 1988 Conservation Agreement between Metropolitan and IID and an associated 1989 Approval Agreement among Metropolitan, IID, CVWD and PVID, extended the term of the 1988 Conservation Agreement and limited the single year amount of water used by CVWD to 20,000 acre-feet. Also included under the QSA is the Delivery and Exchange Agreement between Metropolitan and CVWD for 35,000 acre-feet that provides for Metropolitan to deliver annually up to 35,000 acre-feet of Metropolitan’s State Water Project contractual water to CVWD by exchange with Metropolitan’s available Colorado River supplies. In calendar year 2011, under a supplemental agreement with CVWD, Metropolitan delivered 105,000 acre-feet which consisted of the full 35,000 acre-feet for 2011 plus advance delivery of the full contractual amounts for 2012 and 2013. In 2021, the transfer of water conserved annually by IID to SDCWA is expected to reach 205,000 acre-feet. See description below under the caption “—*Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*”; see also “METROPOLITAN REVENUES—Principal Customers” in this Appendix A. With full implementation of the programs identified in the QSA, at times when California is limited to its basic apportionment of 4.4 million acre-feet per year, Metropolitan expects to be able to annually divert to its service area approximately 850,000 acre-feet of Colorado River water plus water from other water augmentation programs it develops, including the PVID program, which provides up to approximately 130,000 acre-feet of water per year. (Amounts of Colorado River water received by Metropolitan in 2003 through 2011 are discussed under the heading “—Colorado River Aqueduct—*General*” above.)

A complicating factor in completing the QSA was the fate of the Salton Sea, an important habitat for a wide variety of fish-eating birds as a stopover spot along the Pacific flyway. Some of these birds are listed as threatened or endangered species under the State and Federal ESAs. Located at the lowest elevations of an inland basin and fed primarily by agricultural drainage with no outflows other than evaporation, the Salton Sea is trending towards hyper-salinity, which has already impacted the Salton Sea’s fishery. Without mitigation, the transfer of water from IID to SDCWA, one of the core programs implemented under the QSA, would reduce the volume of agricultural run-off from IID into the Salton Sea, which in turn would accelerate this natural trend of the Salton Sea to hyper-salinity. See “—*Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*” below. In passing legislation to implement the QSA, the State Legislature committed the State to undertake restoration of the Salton Sea ecosystem. Restoration of the Salton Sea is subject to selection and approval of an alternative by the Legislature and funding of the associated capital improvements and operating costs. The Secretary for the California Natural Resources Agency submitted an \$8.9-billion preferred alternative for restoration of the Salton Sea to the Legislature in May 2007. While withholding authorization of the preferred alternative, the Legislature has appropriated funds from Proposition 84 to undertake demonstration projects and investigations called for in the Secretary’s recommendation. On September 25, 2010, then-Governor Schwarzenegger signed Senate Bill 51, establishing the “Salton Sea Restoration Council” as a state agency in the Natural Resources Agency to

oversee restoration of the Salton Sea. The council was directed to evaluate alternative Salton Sea restoration plans and to report to the Governor and the Legislature by June 30, 2013 with a recommended plan.

The QSA implementing legislation also established the Salton Sea Restoration Fund, to be funded in part by payments made by the parties to the QSA and fees on certain water transfers among the parties to the QSA. Under the QSA agreements Metropolitan agreed to pay \$20 per acre-foot into the Salton Sea Restoration Fund for any special surplus Colorado River water that Metropolitan elects to take under the Interim Surplus Guidelines, if available. Metropolitan also agreed to acquire up to 1.6 million acre-feet of water conserved by IID, excluding water transferred from IID to SDCWA (see “—*Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*” below), if such water can be transferred consistent with plans for Salton Sea restoration, at an acquisition price of \$250 per acre-foot (in 2003 dollars), with net proceeds to be deposited into the Salton Sea Restoration Fund. No conserved water has been made available to Metropolitan under this program. Metropolitan elected not to take delivery of special surplus water at times when it was available from October 2003 to 2007. No special surplus water has been available since 2007. Metropolitan may receive credit for the special surplus water payments against future contributions for the Lower Colorado River Multi-Species Conservation Program (see “—*Environmental Considerations*” below). In consideration of these agreements, Metropolitan will not have or incur any liability for restoration of the Salton Sea. As part of an effort to mitigate the effects of the drought in the Colorado River Basin that began in 2000, Metropolitan elected not to take delivery of special surplus Colorado River water that was available from October 2003 through 2004 and from 2006 through 2007.

Sale of Water by the Imperial Irrigation District to San Diego County Water Authority. On April 29, 1998, SDCWA and IID executed an agreement (the “Transfer Agreement”) for SDCWA’s purchase from IID of Colorado River water ~~delivered to that is conserved within~~ IID. An amended Transfer Agreement, executed as one of the QSA agreements, set the maximum transfer amount at 205,000 acre-feet in 2021, with the transfer gradually ramping up to that amount over an approximately twenty-year period, stabilizing at 200,000 acre-feet per year beginning in 2023.

No facilities exist to deliver water directly from IID to SDCWA. Accordingly, Metropolitan and SDCWA entered into an exchange contract, pursuant to which SDCWA makes available to Metropolitan at its intake at Lake Havasu on the Colorado River the conserved Colorado River water acquired by SDCWA from IID and water allocated to SDCWA ~~deemed that has been~~ conserved as a result of the lining of the All-American and Coachella Canals. See “*Quantification Settlement Agreement*” above. Metropolitan delivers an equal volume of water from its own sources of supply through portions of its delivery system to SDCWA. The deliveries to both Metropolitan and SDCWA are deemed to be made in equal monthly increments. ~~Metropolitan makes no payment to SDCWA~~ In consideration for the conserved water made available to Metropolitan by SDCWA, but a lower rate is paid by SDCWA makes a payment to Metropolitan for the exchange water delivered by Metropolitan. The price payable by SDCWA is calculated using the charges set by Metropolitan’s Board from time to time to be paid by its member agencies for the conveyance of water through Metropolitan’s facilities. See “METROPOLITAN REVENUES—Wheeling and Exchange Charges” ~~in this Appendix A and “—Litigation Challenging Rate Structure” in this Appendix A for a description of Metropolitan’s charges for the conveyance of water through Metropolitan’s facilities and litigation in which SDCWA and IID are challenging such charges.~~ In 2009, 140,188 acre-feet were delivered by SDCWA for exchange, consisting of 60,000 acre-feet of IID conservation plus 25,759 acre-feet and 54,429 acre-feet of conserved water from the Coachella Canal and All-American Canal lining projects, respectively. In 2010, 151,507 acre-feet were delivered by SDCWA for exchange, consisting of 70,000 acre-feet of IID conservation plus 81,507 acre-feet of conserved water from the combined Coachella Canal and All-American Canal lining projects. In 2011, 143,243 acre-feet were delivered by SDCWA for exchange, consisting of 63,278 acre-feet of IID conservation plus 79,965 acre-feet of conserved water from the Coachella Canal and All-American Canal lining projects. ~~IID informed the Bureau of Reclamation that: in 2011, IID entered into following contracts for 80,000 acre feet, to be conserved partly in 2011 and partly in~~

~~2012, to support the transfer of 80,000 acre-feet from IID to SDCWA in 2011; in 2011 IID conserved 63,278 acre-feet under the following contracts to support the IID-SDCWA transfer~~

The QSA agreements provided for delivery of 80,000 acre-feet of water conserved by IID in 2011. The delivery of conserved water fell short by 16,722 acre-feet. The appropriate accounting for the 2011 IID-SDCWA transfer is under review by the Bureau of Reclamation and will be reflected in a future Colorado River Accounting and Water Use Report. In accordance with the terms of the exchange contract, Metropolitan served SDCWA with a Notice of Default. The exchange contract provides that SDCWA will pay the lower water rate based on deliveries of exchange water that match the value of conserved water made available by IID in each calendar year. Metropolitan has invoiced SDCWA for its higher water rate on the 16,722 acre-feet of additional non-exchange water delivered in 2011.

QSA Related Litigation. On November 5, 2003, IID filed a validation action in Imperial County Superior Court, seeking a judicial determination that thirteen agreements associated with the IID/SDCWA water transfer and the QSA are valid, legal and binding. Other lawsuits also were filed contemporaneously challenging the execution, approval and implementation of the QSA on various grounds. All of the QSA cases were coordinated in Sacramento Superior Court. Between early 2004 and late 2009, a number of pre-trial challenges and dispositive motions were filed by the parties and ruled on by the court, which reduced the number of active cases and narrowed the issues for trial, the first phase of which began on November 9, 2009 and concluded on December 2, 2009. One of the key issues in this first phase was the constitutionality of the QSA Joint Powers Agreement, pursuant to which IID, CVWD and SDCWA agreed to commit \$163 million toward certain mitigation and restoration costs associated with implementation of the QSA and related agreements, and the State agreed to be responsible for any costs exceeding this amount. A final judgment was issued on February 11, 2010, in which the trial court held that the State's commitment was unconditional in nature and, as such, violated the appropriation requirement and debt limitation under the California Constitution. The trial court also invalidated eleven other agreements, including the QSA, because they were inextricably interrelated with the QSA Joint Powers Agreement. Lastly, the trial court ruled that all other claims raised by the parties, including CEQA claims related to the QSA Programmatic EIR and the IID Transfer Project EIR, are moot.

In March 2010, Metropolitan, IID, CVWD, SDCWA, the State and others filed notices of appeal challenging various aspects of the trial court's ruling. On December 7, 2011, the court of appeal issued its ruling reversing, in part, the trial court's ruling. In particular, the court of appeal held that while the State's commitment to fund mitigation costs in excess of \$163 million was unconditional, actual payment of such costs was subject to a valid appropriation by the Legislature, as required under the California Constitution. Moreover, the State's commitment did not create a present debt in excess of the State Constitution's \$300,000 debt limit. Thus, the QSA Joint Powers Agreement was held to be constitutional. The court of appeal also rejected other challenges to this agreement, including that it was beyond the State's authority, there was no "meeting of the minds," and there was a conflict of interest. Finally, in light of its ruling, the court of appeal remanded the matter back to the trial court for further proceedings on the claims that had been dismissed as moot. The impact, if any, that this litigation might have on Metropolitan's water supplies cannot be adequately determined at this time.

On January 28, 2010, Metropolitan was served with a federal complaint filed by the County of Imperial and the Imperial County Air Pollution Control District alleging that execution and implementation of three QSA-related agreements violate NEPA and the federal Clean Air Act. The complaint named the Department of the Interior, Secretary of the Interior, Bureau of Reclamation and Commissioner of Reclamation as defendants, and Metropolitan, CVWD, IID and SDCWA as real parties in interest. With respect to NEPA, the complaint alleged that the environmental impact statement prepared by the Bureau of Reclamation; failed to adequately analyze potential impacts on the Salton Sea and on land use, growth and socioeconomics; improperly segmented various project components; failed to address cumulative impacts; and failed to address mitigation of potential impacts. With respect to the Clean Air Act, the complaint

alleged that the Bureau of Reclamation failed to conduct a conformity analysis as required under the Act and Imperial County Air Pollution Control District's own rules. On April 6, 2012, the court ruled against the plaintiffs and in favor of the defendants on all claims. The court held that the plaintiffs lacked standing to pursue NEPA and Clean Air Act claims and that the NEPA claims lacked merit. On May 4, 2012, the plaintiffs filed a notice of appeal. On May 22, the non-federal defendants filed a notice of cross-appeal. Briefing on all appeals is expected to be completed by the end of 2012.

The Navajo Nation has filed litigation against the Department of the Interior, specifically the Bureau of Reclamation and the Bureau of Indian Affairs, alleging that the Bureau of Reclamation has failed to determine the extent and quantity of the water rights of the Navajo Nation in the Colorado River and that the Bureau of Indian Affairs has failed to otherwise protect the interests of the Navajo Nation. The complaint challenges the adequacy of the environmental review for the Interim Surplus Guidelines (as defined under "*Interim Surplus Guidelines*" below) and seeks to prohibit the Department of the Interior from allocating any "surplus" water until such time as a determination of the rights of the Navajo Nation is completed. Metropolitan has filed a motion to intervene in this action. In October 2004 the court granted the motions to intervene and stayed the litigation to allow negotiations among the Navajo Nation, federal defendants, CAWCD, State of Arizona and Arizona Department of Water Resources. The Navajo Nation approved the terms of a proposed settlement in 2010. Under its terms the Navajo would have specified rights to water from the Colorado River, the Little Colorado River and groundwater basins under the reservation. All Colorado River water would come from Arizona's apportionment. There would be no financial or water resource impact on Metropolitan. The proposed agreement requires approval of all the affected bodies and federal implementing legislation. The litigation stay has been extended until February 15, 2013, to permit the parties to finalize the settlement. If the settlement is not finalized, the impact on Metropolitan, if any, cannot be adequately determined at this time.

Interim Surplus Guidelines. In January 2001, the Secretary of the Interior adopted guidelines (the "Interim Surplus Guidelines") for use through 2016 in determining if there is surplus Colorado River water available for use in California, Arizona and Nevada. The purpose of the Interim Surplus Guidelines is to provide a greater degree of predictability with respect to the availability and quantity of surplus water through 2016. The Interim Surplus Guidelines were amended in 2007, with the new Guidelines extending through 2026 (see "*Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead*" below). The Interim Surplus Guidelines contain a series of benchmarks for reductions in agricultural use of Colorado River water within California by set dates.

Under the Interim Surplus Guidelines, Metropolitan initially expected to divert up to 1.25 million acre-feet of Colorado River water annually under foreseeable runoff and reservoir storage scenarios from 2004 through 2016. However, an extended drought in the Colorado River Basin reduced these initial expectations. From 2000 to 2004, snow pack and runoff in the Colorado River Basin were well below average. Although runoff was slightly above average in 2005 and 2008, average annual runoff from 2000 through 2010 was 69 percent of normal, representing the driest eleven-year period on record. In November 2010, Lake Mead's elevation had dropped below 1,081 feet above sea level, the lowest elevation since 1937. Precipitation over the Colorado River Basin from October 2010 through April 2011 was significantly above normal. Upper Colorado River Basin snowpack measured on May 1, 2011 was 150 percent of normal with accumulations at the highest level on record and the April-July runoff measuring 163 percent of normal. The above-normal precipitation triggered more than 4 million acre-feet of additional releases from Lake Powell to Lake Mead, the most since 1997. Lake Mead's elevation reached 1,133 feet in December 2011, approximately 51 feet higher than observed in November 2010. Each ten-foot increase in Lake Mead's elevation represents approximately 1 million acre-feet of increased storage. Metropolitan's 2011 Colorado River supply was 884,694 acre-feet. Metropolitan diverted over 698,990 acre-feet from the Colorado River during calendar year 2011, and left approximately 186,000 acre-feet for storage in Lake Mead as intentionally-created surplus water. As of August 5, 2012, Lake Mead's elevation was 1,116 feet.

SNWA and Metropolitan entered into an Agreement Relating to Implementation of Interim Colorado River Surplus Guidelines on May 16, 2002, in which SNWA and Metropolitan agreed to the allocation of unused apportionment as provided in the Interim Surplus Guidelines and on the priority of SNWA for interstate banking of water in Arizona. SNWA and Metropolitan entered into a storage and interstate release agreement on October 21, 2004. Under this program, Nevada can request that Metropolitan store unused Nevada apportionment in California. The amount of water stored through 2011 under this agreement was 70,000 acre-feet. In subsequent years, Nevada may request recovery of this stored water. As part of a recently executed amendment, it is expected that Nevada will not request return of this water before 2022. The stored water provides flexibility to Metropolitan for blending Colorado River water with State Water Project water and improves near-term water supply reliability.

Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead. In November 2007, the Bureau of Reclamation issued a Final Environmental Impact Statement (“EIS”) regarding new federal guidelines concerning the operation of the Colorado River system reservoirs. These new guidelines provide water release criteria from Lake Powell and water storage and water release criteria from Lake Mead during shortage and surplus conditions in the Lower Basin, provide a mechanism for the storage and delivery of conserved system and non-system water in Lake Mead and extend the Interim Surplus Guidelines through 2026. The Secretary of the Interior issued the final guidelines through a Record of Decision signed in December 2007. The Record of Decision and accompanying agreement among the Colorado River Basin States protect reservoir levels by reducing deliveries during drought periods, encourage agencies to develop conservation programs and allow the states to develop and store new water supplies. The Colorado River Basin Project Act of 1968 insulates California from shortages in all but the most extreme hydrologic conditions.

Intentionally-Created Surplus Program. Metropolitan and the Bureau of Reclamation executed an agreement on May 26, 2006 for a demonstration program that allowed Metropolitan to leave conserved water in Lake Mead that Metropolitan would otherwise have used in 2006 and 2007. Only “intentionally-created surplus” water (water that has been conserved through an extraordinary conservation measure, such as land fallowing) was eligible for storage in Lake Mead under this program. See the table “Metropolitan’s Water Storage Capacity and Water in Storage” under the heading “—Storage Capacity and Water in Storage” below. Metropolitan may store additional intentionally-created surplus water in Lake Mead under the federal guidelines for operation of the Colorado River system reservoirs described above under the heading “*Lower Basin Shortage Guidelines and Coordinated Management Strategies for Lake Powell and Lake Mead.*” The Secretary of the Interior will deliver intentionally-created surplus water to Metropolitan in accordance with the terms of a December 13, 2007 Delivery Agreement between the United States and Metropolitan. As of January 2012, Metropolitan had approximately 434,840 acre-feet in its intentionally-created surplus accounts, made up of water conserved by fallowing in the Palo Verde Valley and from the yield allocated to Metropolitan from the Drop 2 Reservoir Project and the Yuma Desalting Plant pilot run. Metropolitan stored 193,351 acre-feet of intentionally-created surplus water in 2011, including 7,647 acre-feet as a result of the Yuma Desalting Plant pilot run.

Environmental Considerations. Federal and state environmental laws protecting fish species and other wildlife species have the potential to affect Colorado River operations. A number of species that are on either “endangered” or “threatened” lists under the ESAs are present in the area of the Lower Colorado River, including among others, the bonytail chub, razorback sucker, southwestern willow flycatcher and Yuma clapper rail. To address this issue, a broad-based state/federal/tribal/private regional partnership that includes water, hydroelectric power and wildlife management agencies in Arizona, California and Nevada have developed a multi-species conservation program for the main stem of the Lower Colorado River (the Lower Colorado River Multi-Species Conservation Program or “MSCP”). The MSCP allows Metropolitan to obtain federal and state permits for any incidental take of protected species resulting from current and future water and power operations of its Colorado River facilities and to minimize any uncertainty from additional listings of endangered species. The MSCP also covers operations of federal dams and power

plants on the river that deliver water and hydroelectric power for use by Metropolitan and other agencies. The MSCP covers 27 species and habitat in the Lower Colorado River from Lake Mead to the Mexican border for a term of 50 years. The total cost of the MSCP to Metropolitan will be about \$88 million (in 2003 dollars), and will range between \$0.8 million and \$4.6 million annually.

The non-profit conservation organization Grand Canyon Trust filed litigation in December 2007 against the Bureau of Reclamation in the United States District Court for the District of Arizona, alleging that the Bureau of Reclamation's planning for, and operation of, the Glen Canyon Dam in the Upper Basin of the Colorado River system (which impounds Lake Powell) does not comply with requirements of NEPA and the Federal ESA. ~~Grand Canyon Trust later named the USFWS as a defendant. Metropolitan, IID and CAWCD have~~ Metropolitan, IID, CAWCD, the seven basin states and several water and energy agencies intervened in this case. ~~On May 27, 2009, the court ordered the Bureau of Reclamation to reconsider how the dam flows may harm the endangered fish and develop a new operating plan. Grand Canyon Trust filed its third supplemental complaint challenging the Bureau of Reclamation's latest schedule of releases from Lake Powell on September 23, 2010.~~ On March 29, 2011, the ~~court issued a final ruling~~ trial court issued a final judgment upholding the Bureau of Reclamation's prior decisions for Glen Canyon Dam operations. The Grand Canyon Trust appealed. ~~Oral arguments before the U.S. On August 13, 2012, the United States Court of Appeals for the Ninth Circuit were held on June 11, 2012.~~ affirmed the decision of the Arizona district court. The Grand Canyon Trust has a 45-day period in which to request a rehearing by a larger panel of Ninth Circuit justices.

Quagga Mussel Control Program. In January 2007 quagga mussels were discovered for the first time in Lake Mead. Quagga mussels can reproduce quickly and, if left unmanaged, can clog intakes and raw water conveyance systems, alter or destroy fish habitats and affect lakes and beaches. Quagga mussels were introduced in the Great Lakes in the late 1980s. These organisms infest much of the Great Lakes basin, the St. Lawrence Seaway, and much of the Mississippi River drainage system. The most likely source of the quagga mussel infestation is recreational boats from water bodies around the Great Lakes, which were transported over 1,000 miles west to Lake Mead. In response to the Lake Mead finding, the California Department of Fish and Game created a multi-agency task force with Metropolitan as one of its members. The initial survey of the Colorado River to ascertain the extent of the quagga mussel colonization detected low densities in Lake Mead, Lake Mohave and Lake Havasu and in the intake of the Central Arizona Project. Quagga mussels were also detected at the Colorado River Aqueduct intake pumping plant, Gene Wash and Copper Basin reservoirs, in portions of the Colorado River Aqueduct and in Lake Skinner. A three-week shutdown of the Colorado River Aqueduct for rehabilitation and repairs in March 2007 also permitted inspection for quagga mussels. Desiccation of mussels from emptying the aqueduct during the shutdown, followed by a week of chlorination to kill or limit spread of any remaining mussels after the aqueduct was placed back in service, helped control mussels found there. Shutdowns of the Colorado River Aqueduct in July 2007, October 2007 and March 2008 permitted additional quagga mussel inspection and facilitated some control measures.

Metropolitan is working to enhance its ability to detect the mussels, studying mussel transport and settling in Metropolitan conveyance systems, assessing additional, more cost-effective methods to control mussels and developing and implementing control strategies for mussels in Metropolitan's lakes and reservoirs. The California Department of Fish and Game has approved Metropolitan's recreational facilities and boating plan for Diamond Valley Lake and Lake Skinner, which requires inspection of boats and quarantine of those that are potential carriers of mussels, and Metropolitan's water releases management plan, which should minimize the potential for mussels to be introduced into new water bodies while allowing for water releases associated with dewatering of aqueducts and pipelines for maintenance, repair, or upgrades. In addition, the California Department of Fish and Game provided Metropolitan with a permit approving laboratory research on quagga mussels to advance the understanding of mussel biology in California and benefit future efforts to manage the invasive species. Future quagga mussel control efforts are expected to include infrastructure upgrades and recommendations on boating practices or additional facilities

to control the spread of mussels in the Colorado River Aqueduct system and additional long-term measures. In September 2007, the Board appropriated \$5.91 million for design and construction of interim chlorination facilities at Copper Basin and Lake Mathews, design of permanent chlorination facilities at Copper Basin, Lake Mathews and Diamond Valley Lake and related quagga mussel control measures. In February 2008, the Board appropriated \$1.77 million for a new chlorine injection point at the Lake Skinner Outlet Conduit and for the procurement of liquid chlorine trailers and mobile chlorination units. In August 2008, the Board appropriated an additional \$1.87 million to complete the chlorination facilities at Copper Basin and Lake Mathews and in June 2009, the Board appropriated \$1.13 million for design and construction of a chlorination system to control quagga mussel growth at the Skinner oxidation retrofit facilities. Metropolitan estimates that its costs for controlling quagga mussels could exceed \$10 million per year.

Water Transfer, Storage and Exchange Programs

General. California's agricultural activities consume approximately 34 million acre-feet of water annually, which is approximately 80 percent of the total water used for agricultural and urban uses and 40 percent of the water used for all consumptive uses, including environmental demands. Voluntary water transfers and exchanges can make a portion of this agricultural water supply available to support the State's urban areas. Such existing and potential water transfers and exchanges are an important element for improving the water supply reliability within Metropolitan's service area and accomplishing the reliability goal set by Metropolitan's Board. Metropolitan is currently pursuing voluntary water transfer and exchange programs with State, federal, public and private water districts and individuals. The following are summary descriptions of some of these programs.

Arvin-Edison/Metropolitan Water Management Program. In December 1997, Metropolitan entered into an agreement with the Arvin-Edison Water Storage District ("Arvin-Edison"), an irrigation agency located southeast of Bakersfield, California. Under the program, Arvin-Edison stores water on behalf of Metropolitan. In January 2008, Metropolitan and Arvin-Edison amended the agreement to enhance the program's capabilities and to increase the delivery of water to the California Aqueduct. Up to 350,000 acre-feet of Metropolitan's water may be stored and Arvin-Edison is obligated to return up to 75,000 acre-feet of stored water in any year to Metropolitan, upon request. The agreement will terminate in 2035 unless extended. To facilitate the program, new wells, spreading basins and a return conveyance facility connecting Arvin-Edison's existing facilities to the California Aqueduct have been constructed. The agreement also provides Metropolitan priority use of Arvin-Edison's facilities to convey high quality water available on the east side of the San Joaquin Valley to the California Aqueduct. Metropolitan's current storage account under the Arvin-Edison/Metropolitan Water Management Program is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading, "—Storage Capacity and Water in Storage" below.

Semitropic/Metropolitan Groundwater Storage and Exchange Program. In 1994 Metropolitan entered into an agreement with the Semitropic Water Storage District ("Semitropic"), located adjacent to the California Aqueduct north of Bakersfield, to store water in the groundwater basin underlying land within Semitropic. The minimum annual yield available to Metropolitan from the program is 31,500 acre-feet of water and the maximum annual yield is 223,000 acre-feet of water depending on the available unused capacity and the State Water Project allocation. Metropolitan's current storage account under the Semitropic program is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading, "—Storage Capacity and Water in Storage" below.

California Aqueduct Dry-Year Transfer Program. Metropolitan has entered into agreements with the Kern Delta Water District, the Mojave Water Agency (Demonstration Water Exchange Program) and the San Bernardino Valley Municipal Water District ("SBVMWD") to insure against regulatory and operational uncertainties in the State Water Project system that could impact the reliability of existing supplies. The total

potential yield for the three agreements is approximately 80,000 acre-feet of water per year when sufficient water is available.

Metropolitan entered into an agreement with SBVMWD in April 2001 to coordinate the use of facilities and State Water Project water supplies. The agreement allows Metropolitan a minimum purchase of 20,000 acre-feet on an annual basis with the option to purchase additional water when available. Also, the program includes 50,000 acre-feet of carryover storage. In addition to water being supplied using the State Water Project, the previously stored water can be returned using an interconnection between the San Bernardino Central Feeder and Metropolitan's Inland Feeder. This program terminates on December 31, 2014. Metropolitan entered into an agreement with Kern Delta Water District on May 27, 2003, for a groundwater banking and exchange transfer program to allow Metropolitan to store up to 250,000 acre-feet of State Water Contract water in wet years and permit Metropolitan, at Metropolitan's option, a return of up to 50,000 acre-feet of water annually during hydrologic and regulatory droughts. Additionally, Metropolitan entered into a groundwater banking and exchange transfer agreement with Mojave Water Agency on October 29, 2003. This agreement was amended in 2011 to allow for the cumulative storage of up to 390,000 acre-feet. The agreement allows for Metropolitan to store water in an exchange account for later return. Metropolitan's current storage account under these programs is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading, "—Storage Capacity and Water in Storage" below.

Other Water Purchase, Storage and Exchange Programs in the San Joaquin and Sacramento Valleys. Metropolitan has been negotiating, and will continue to pursue, water purchase, storage and exchange programs with other agencies in the Sacramento and San Joaquin Valleys. These programs involve the storage of both State Water Project supplies and water purchased from other sources to enhance Metropolitan's dry-year supplies and the exchange of normal year supplies to enhance Metropolitan's water reliability and water quality, in view of dry conditions and potential impacts from the ESA cases discussed above under the heading "—State Water Project—*Endangered Species Act Considerations.*" In addition, in the fall of 2008 DWR convened the State Drought Water Bank (the "Drought Water Bank") as a one-year program to help mitigate water shortages in 2009. During 2009, Metropolitan purchased 36,900 acre-feet of Central Valley Water supplies through the Drought Water Bank, resulting in approximately 29,000 acre-feet of water deliveries after accounting for carriage and conveyance losses. In calendar year 2010, Metropolitan participated with other State Water Contractors as a group to purchase 88,137 acre-feet of water, resulting in approximately 68,000 acre-feet of deliveries to Metropolitan after carriage and conveyance losses. Additionally during 2010, Metropolitan entered into two transactions with the Westlands Water District and the San Luis Water District, neither of which is subject to carriage losses. Under the first transaction, Metropolitan purchased 18,453 acre-feet of water. In the second, Metropolitan accepted delivery of 110,692 acre-feet of water stored in the San Luis Reservoir and returned two-thirds of that amount from Metropolitan's State Water Project supply in 2011 for a net yield of approximately 37,000 acre-feet.

Metropolitan entered into an agreement with DWR in December 2007 to purchase a portion of the water released by the Yuba County Water Agency ("YCWA"). YCWA was involved in a SWRCB proceeding in which it was required to increase Yuba River fishery flows. Within the framework of agreements known as the Yuba River Accord, DWR and the Bureau of Reclamation entered into agreements for the long-term purchase of water from YCWA. Metropolitan and other State Water Project contractors entered into separate agreements with DWR for purchase of portions of the water made available. Metropolitan's agreement allows Metropolitan to purchase at least 13,750 acre-feet to 35,000 acre-feet per year of water supplies in dry years through 2025. The agreement permits YCWA to transfer additional supplies at its discretion. For calendar years 2008, 2009 and 2010, Metropolitan purchased 26,430 acre-feet, 42,915 acre-feet and 67,068 acre-feet of water, respectively, from YCWA under this program. YCWA did not offer transfer supplies in calendar year 2011.

Metropolitan/CVWD/Desert Water Agency Exchange and Advance Delivery Agreement. Metropolitan has agreements with the CVWD and the Desert Water Agency ("Desert") that require Metropolitan to exchange its Colorado River water for those agencies' State Water Project contractual water on an annual basis. Because Desert and CVWD do not have a physical connection to the State Water Project, Metropolitan takes delivery of Desert's and CVWD's State Water Project supplies and delivers a like amount of Colorado River water to the agencies. In accordance with an advance delivery agreement executed by Metropolitan, CVWD and Desert, Metropolitan has delivered Colorado River water in advance to these agencies for storage in the Upper Coachella Valley groundwater basin. In years when it is necessary to augment available supplies to meet local demands, Metropolitan has the option to meet the exchange delivery obligation through drawdowns of the advance delivery account, rather than deliver its Colorado River supply. Metropolitan's current storage account under the CVWD/Desert program is shown in the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading, "—Storage Capacity and Water in Storage" below. In addition to the CVWD/Desert exchange agreements, Metropolitan has entered into separate agreements with CVWD and Desert for delivery of non-State Water Project supplies acquired by CVWD or Desert. Similarly, Metropolitan takes delivery of these supplies from State Water Project facilities and incurs an exchange obligation to CVWD or Desert. Since 2008, Metropolitan has received a net additional supply of 28,058 acre-feet of water acquired by CVWD and Desert.

Other Agreements. Metropolitan is entitled to storage and access to stored water in connection with various storage programs and facilities. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct" and "REGIONAL WATER RESOURCES—Local Water Supplies—*Conjunctive Use*" in this Appendix A, as well as the table "Metropolitan's Water Storage Capacity and Water in Storage" under the heading, "—Storage Capacity and Water in Storage" below.

Storage Capacity and Water in Storage

Metropolitan's storage capacity, which includes reservoirs, conjunctive use and other groundwater storage programs within Metropolitan's service area and groundwater and surface storage accounts delivered through the State Water Project or Colorado River Aqueduct, is approximately 5.54 million acre-feet. In 2011, approximately 626,000 acre-feet of stored water was emergency storage that was reserved for use in the event of supply interruptions from earthquakes or similar emergencies (see "METROPOLITAN'S WATER DELIVERY SYSTEM—Seismic Considerations" in this Appendix A), as well as extended drought. Metropolitan's emergency storage requirement is established periodically to provide a six-month water supply at 75 percent of member agencies retail demand under normal hydrologic conditions. Metropolitan's ability to replenish water storage, both in the local groundwater basins and in surface storage and banking programs, has been limited by Bay-Delta pumping restrictions under the Interim Remedial Order in *NRDC v. Kemphorne* and the biological opinions issued for listed species. See "—State Water Project—*Endangered Species Act Considerations*" above. Metropolitan replenishes its storage accounts when imported supplies exceed demands. Effective storage management is dependent on having sufficient years of excess supplies to store water so that it can be used during times of shortage. Historically, excess supplies have been available in about seven of every ten years. Metropolitan forecasts that, with anticipated supply reductions from the State Water Project due to pumping restrictions, it will need to draw down on storage in about seven of ten years and will be able to replenish storage in about three years out of ten. This reduction in available supplies extends the time required for storage to recover from drawdowns and could require Metropolitan to implement its Water Supply Allocation Plan during extended dry periods.

As a result of increased State Water Project supplies and reduced demands in 2010 and 2011, Metropolitan has rebuilt its storage after several years of withdrawals. From 2007 to 2009 Metropolitan drew down approximately one million acre-feet of its stored water to meet regional demands. During calendar year 2011, Metropolitan increased storage of State Water Project supplies in Central Valley groundwater storage programs by about 297,000 acre-feet. In addition, storage in Diamond Valley Lake on January 1, 2012 was approximately 786,000 acre-feet, an increase of about 148,000 acre-feet from Diamond

Valley Lake's level on January 1, 2011. Metropolitan increased aggregate storage by approximately 698,000 acre-feet in 2011. This brought total storage at the end of 2011 to approximately 3.03 million acre-feet, including emergency storage, which was the highest end-of-year total reserves in Metropolitan's history. At its previous highest level in July 2006, Metropolitan's storage was 2.74 million acre-feet, including emergency storage. The following table shows Metropolitan's storage, including emergency storage, as of January 1, 2012.

METROPOLITAN'S WATER STORAGE CAPACITY AND WATER IN STORAGE⁽¹⁾
(in Acre-Feet)

<u>Water Storage Resource</u>	<u>Storage Capacity</u>	<u>Water in Storage January 1, 2012</u>	<u>Water in Storage January 1, 2011</u>	<u>Water in Storage January 1, 2010</u>
<i>Colorado River Aqueduct</i>				
Desert / CVWD Advance Delivery Account				
	800,000	209,000	178,000	45,000
Lake Mead ICS	1,500,000	435,000	256,000	146,000
CAWCD	n/a ⁽²⁾	-0-	-0-	8,000
Subtotal	2,300,000	644,000	434,000	199,000
<i>State Water Project</i>				
Arvin-Edison Storage Program				
	350,000	166,000	109,000	95,000
Semitropic Storage Program				
	350,000	245,000	111,000	44,000
Kern Delta Storage Program				
	250,000	135,000	82,000	10,000
San Bernardino Valley MWD				
Coordinated Operating Agreement	50,000	-0-	-0-	-0-
Mojave Storage Program				
	390,000 ⁽⁵⁾	45,000	-0-	3,000
Castaic Lake and Lake Perris ⁽³⁾				
	219,000	219,000	219,000	175,000
Metropolitan Article 56 Carryover ⁽⁴⁾				
	200,000 ⁽⁶⁾	200,000	-0-	68,000
Other State Water Project Carryover				
	n/a ⁽⁷⁾	43,000	162,000	64,000
Emergency Storage				
	334,000 ⁽⁸⁾	334,000	334,000	334,000
Subtotal	2,143,000	1,387,000	1,017,000	793,000
<i>Within Metropolitan's Service Area⁽⁹⁾</i>				
Diamond Valley Lake				
	810,000	786,000	638,000	384,000
Lake Mathews				
	182,000	142,000	139,000	125,000
Lake Skinner				
	44,000	37,000	40,000	36,000
Subtotal	1,036,000	965,000	817,000	545,000
<i>Member Agency Storage Programs</i>				
Cyclic Storage, Conjunctive Use, and Supplemental Storage				
	452,000	31,000	60,000	80,000
Total	5,931,000	3,027,000	2,328,000	1,617,000

Source: Metropolitan.

- (1) Water storage capacity and water in storage are based on accounting estimates and are subject to change.
- (2) Metropolitan has recovered the remaining balance and the storage agreement with Central Arizona Water Conservation District has been closed.
- (3) Flexible storage allocated to Metropolitan under its State Water Contract.
- (4) Article 56 Carryover storage capacity is dependent on the annual State Water Project allocation, which varies from year to year. Article 56 water is unused water that is allocated to a state water contractor in a given year pursuant to the State Water Contract. Metropolitan's carryover water is stored in the San Luis Reservoir.
- (5) Following a period during which Metropolitan was not permitted to increase storage, the Mojave Storage Program agreement was amended in 2011 to allow for cumulative storage of up to 390,000 acre-feet. (Footnotes continued on next page)

- (6) Metropolitan's State Water Project carryover capacity ranges from 100,000 to 200,000 acre-feet, on a sliding scale that depends on the final State Water Project allocation. At allocations of 50 percent or less, Metropolitan may store 100,000 acre-feet, and at allocations of 75 percent or greater, Metropolitan may store up to 200,000 acre-feet. For the purposes of this table, the highest possible carryover capacity is displayed.
- (7) At Metropolitan's request Desert Water Agency and CVWD exercise their State Water Contract carryover rights. It is listed as "n/a" due to the unpredictable nature of the actual storage capacity available.
- (8) In 2010, the portion of State Water Project reservoir storage classified as emergency storage was reduced from 351,000 acre-feet to 334,000 acre-feet.
- (9) Includes emergency storage in Metropolitan's reservoirs: 319,000 acre-feet in 2009 and 292,000 acre-feet in 2010 and 2011, respectively.

Water Conservation

The central objective of Metropolitan's water conservation program is to help ensure adequate, reliable and affordable water supplies for Southern California by actively promoting efficient water use. The importance of conservation to the region has increased in recent years because of drought conditions in the State Water Project watershed and court-ordered restrictions on Bay-Delta pumping, as described under "METROPOLITAN'S WATER SUPPLY—State Water Project" in this Appendix A. Water conservation is an integral component of Metropolitan's IRP Strategy, Water Surplus and Drought Management Plan and Water Supply Allocation Plan, each described in this Appendix A under "METROPOLITAN'S WATER SUPPLY."

Metropolitan's conservation program has largely been developed to assist its member agencies in meeting the "best management practices" ("BMP") of the California Urban Water Conservation Council's Memorandum of Understanding Regarding Urban Water Conservation in California ("CUWCC MOU") and to meet the conservation goals of the 2010 IRP Update. See "—Integrated Water Resources Plan" above. Under the terms of the CUWCC MOU and Metropolitan's Conservation Credits Program, Metropolitan assists and co-funds member agency conservation programs designed to achieve greater water use efficiency in residential, commercial, industrial, institutional and landscape uses. Metropolitan uses its Water Stewardship Rate, which is charged for every acre-foot of water conveyed by Metropolitan, together with available grant funds, to fund conservation incentives and other water management programs. All users of Metropolitan's system benefit from the system capacity made available by investments in demand management programs like the Conservation Credits Program. See "METROPOLITAN REVENUES—Rate Structure—*Water Stewardship Rate*" in this Appendix A. Direct spending by Metropolitan on active conservation incentives, including rebates for water-saving plumbing fixtures, appliances and equipment, from fiscal year 1989-90 through fiscal year 2011-12 was more than \$320 million. The 2010 Integrated Water Resources Plan Update estimates that 1,037,000 acre-feet of water will be conserved annually in southern California by 2025. See "METROPOLITAN'S WATER SUPPLY—Integrated Water Resources Plan."

The Water Surplus and Drought Management Plan ("WSDM Plan"), which was adopted by Metropolitan's Board in April 1999, evolved from Metropolitan's experiences during the droughts of 1976-77 and 1987-92. The WSDM Plan splits resource actions into two major categories: Surplus Actions and Shortage Actions. The Surplus Actions store surplus water, first inside then outside the region. The Shortage Actions of the WSDM Plan are split into three sub-categories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as a part of the response to prevailing shortage conditions. Conservation and water efficiency programs are part of Metropolitan's resource management strategy through all categories.

Metropolitan's plan for allocation of water supplies in the event of shortage (the "Water Supply Allocation Plan"; see "—Water Supply Allocation Plan" below) allocates Metropolitan's water supplies among its member agencies, based on the principles contained in the WSDM Plan, to reduce water use and drawdowns from water storage reserves. Metropolitan's member agencies and retail water suppliers in Metropolitan's service area also have the ability to implement water conservation and allocation programs,

and some of the retail suppliers in Metropolitan's service area have initiated conservation measures. The success of conservation measures in conjunction with the Water Supply Allocation Plan is evidenced as a contributing factor in the lower than budgeted water sales during fiscal years 2009-10 and 2010-11.

Legislation approved in November 2009 sets a statewide conservation target for urban per capita water use of 20 percent reductions by 2020 (with credits for existing conservation) at the retail level, providing an additional catalyst for conservation by member agencies and retail suppliers. (See "—State Water Project—*Bay-Delta Regulatory and Planning Activities*" above.) Metropolitan's water sales projections incorporate an ~~accounting~~ estimate of conservation savings that will reduce retail demands. Current projections include an estimate of additional water use efficiency savings that would result from local agencies reducing their per capita water use in response to the 20 percent by 2020 conservation savings goals required by recent legislation as well as an estimate of additional conservation that would have to occur to reach Metropolitan's IRP goal of reducing overall regional per capita water use by 20 percent by 2020.

Water Supply Allocation Plan

The Water Supply Allocation Plan provides a formula for equitable distribution of available water supplies in case of extreme water shortages within Metropolitan's service area. Delivery within a member agency of more than its allocated amount of Metropolitan supplies will subject the member agency to a penalty of one to four times Metropolitan's full service rate for untreated Tier 2 water, depending on how much the member agency's water use for the twelve-month period beginning on July 1 exceeds its allocated amount. See "METROPOLITAN REVENUES—Water Rates by Water Category" in this Appendix A. Any penalties collected may be rebated to the member agency that paid them to fund water management projects.

The Water Supply Allocation Plan was approved by the Board in February 2008. On April 14, 2009, Metropolitan's Board adopted a resolution declaring a regional water shortage and implementing the Water Supply Allocation Plan, effective July 1, 2009. The Board set the "Regional Shortage Level" at Water Supply Allocation Plan Level 2, which required reduction of regional water use by approximately ten percent and resulted in a total allocation of about 2.09 million acre-feet of Metropolitan water in fiscal year 2009-10. On April 13, 2010, the Board adopted a resolution recognizing the continuing regional water shortage and again setting the Regional Shortage Level at Water Supply Allocation Plan Level 2, which sustained the regional water use reduction of approximately 10 percent. Due to improved hydrologic and storage conditions, on April 12, 2011, the Board terminated implementation of the 2010-11 Water Supply Allocation Plan, restoring imported water deliveries to member agencies without risk of allocation penalties. Although the Act gives each of Metropolitan's member agencies a preferential entitlement to purchase a portion of the water served by Metropolitan (see "METROPOLITAN REVENUES—Preferential Rights"), historically, these rights have not been used in allocating Metropolitan's water.

Metropolitan's member agencies and retail water suppliers in Metropolitan's service area also may implement water conservation and allocation programs within their respective service territories in times of shortage.

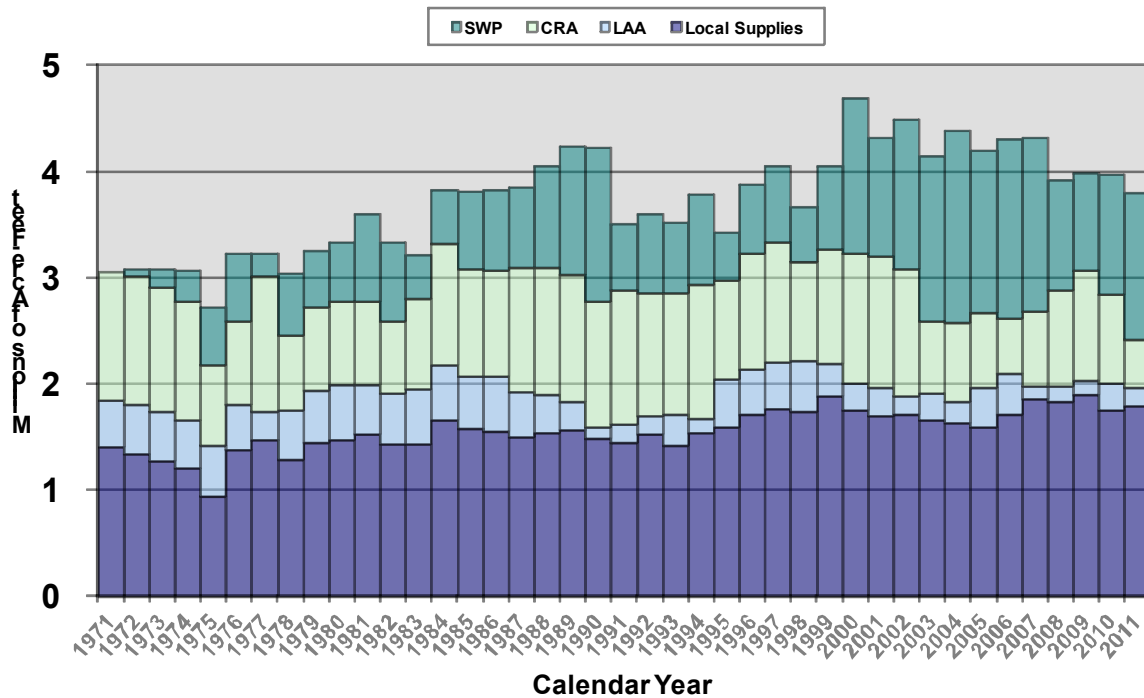
REGIONAL WATER RESOURCES

The water supply for Metropolitan's service area is provided in part by Metropolitan and in part by non-Metropolitan sources available to members. Approximately 60 percent of the water supply for Metropolitan's service area is imported water received by Metropolitan from its Colorado River Aqueduct and the State Water Project and by the City of Los Angeles (the "City") from the Los Angeles Aqueduct. While the City is one of the largest water customers of Metropolitan, it receives a substantial portion of its water from the Los Angeles Aqueduct and local groundwater supply. The balance of water within the region is produced locally, primarily from groundwater supplies and runoff.

Metropolitan's member agencies are not required to purchase or use any of the water available from Metropolitan. Some agencies depend on Metropolitan to supply ~~100 percent~~ nearly all of their water needs, regardless of the weather. Other agencies, with local surface reservoirs or aqueducts that capture rain or snowfall, rely on Metropolitan more in dry years than in years with heavy rainfall, while others, with ample groundwater supplies, purchase Metropolitan water only to supplement local supplies ~~or~~ and to recharge groundwater basins. The demand for supplemental supplies provided by Metropolitan is dependent on water use at the retail consumer level and the amount of locally supplied ~~water~~ and conserved water. See "METROPOLITAN'S WATER SUPPLY—Water Conservation" and "—Local Water Supplies" below. Consumer demand and locally supplied water vary from year to year, resulting in variability in water sales. Future reliance on Metropolitan supplies will be dependent, among other things, on local projects and the amount of water, if any, that may be derived from sources other than Metropolitan. In recent years, supplies and demands have been affected by drought, water use restrictions, economic conditions, weather conditions and environmental laws, regulations and judicial decisions, as described above under "METROPOLITAN'S WATER SUPPLY." For information on Metropolitan's water sales revenues, see "METROPOLITAN REVENUES" and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES" in this Appendix A.

The following graph shows a summary of the regional sources of water supply for the years 1971 to 2011. Local supplies available within Metropolitan's service area are augmented by water imported by the City through the Los Angeles Aqueduct ("LAA") and Metropolitan supplies provided through the Colorado River Aqueduct ("CRA") and the State Water Project ("SWP").

**Sources of Water Supply in the Metropolitan Service Area
(1971-2011)**



Source: Metropolitan.

The major sources of water for Metropolitan's member agencies in addition to supplies provided by Metropolitan are described below.

Los Angeles Aqueduct

The City, through its Department of Water and Power, operates its Los Angeles Aqueduct system to import water from the Owens Valley and the Mono Basin on the eastern slopes of the Sierra Nevada in eastern California. Prior to the 1990-1991 drought, the City had imported an average of ~~460,000~~440,000 acre-feet of water annually from the combined Owens Valley/Mono Basin system, of which about 90,000 acre-feet came from the Mono Basin. Under the Mono Lake Basin Water Right Decision (Decision 1631) issued in September 1994, which revised the Department of Water and Power's water rights licenses in the Mono Basin, the City is limited to export 16,000 acre-feet annually from the Mono Basin until it reaches its target elevation of 6,391 feet above mean sea level.

Pursuant to the City's turnout agreement with DWR, Antelope Valley-East Kern Water Agency ("AVEK") and Metropolitan, the Department of Water and Power commenced construction in 2010 of the turnout facilities along the California Aqueduct within AVEK's service area. Upon completion, expected in approximately ~~September 2014~~, January 2015, the turnout will enable delivery of water from the California Aqueduct to the Los Angeles Aqueduct. Conditions precedent to such delivery of water include obtaining agreements for the transfer of non-State Water Project water directly from farmers, water districts or others in Northern and Central California, available capacity in the California Aqueduct and compliance with State Water Project water quality requirements. The agreement ~~limits~~allows for use of the turnout to delivery of non-State Water Project water annually to the City in amounts not to exceed the supplies lost to the City as a result of its Eastern Sierra environmental obligations, including water for the Lower Owens River Project and the Owens Lake Dust Mitigation Project which could use up to 95,000 acre-feet of Los Angeles Aqueduct water. Historically, the Los Angeles Aqueduct and local groundwater supplies have been nearly sufficient to meet the City's water requirements during normal water supply years. As a result, prior to the 1990-1991 drought only about 13 percent of the City's water needs (approximately ~~85,000~~82,000 acre-feet) were supplied by Metropolitan. From fiscal year 2000-01 to fiscal year 2010-11, approximately 32 to 71 percent of the City's total water requirements were met by Metropolitan. For the five fiscal years ended June 30, 2012, the City's water deliveries from Metropolitan averaged approximately ~~300,000~~301,000 acre-feet per year, which constituted approximately ~~52~~51 percent of the City's total water supply. Deliveries from Metropolitan to the City during this period varied between approximately 167,000 acre-feet per year and approximately 433,000 acre-feet per year. See "METROPOLITAN REVENUES—Principal Customers" in this Appendix A. According to the Los Angeles Department of Water and Power's Year 2010 Urban Water Management Plan, the City is planning to increase locally-developed supplies including recycled water, new conservation, stormwater recapture and groundwater cleanup from the average for the five-year period ending June 30, 2010 of 12 percent to 43 percent of its normal year supplies by fiscal year 2034-35. Accordingly, the City's reliance on Metropolitan supplies will decrease from the five year average ending June 30, 2011 of 52 percent to 24 percent of its normal year supplies by fiscal year 2034-35. However, the City may still purchase up to 511,000 acre-feet per year or 82 percent of its dry year supplies from Metropolitan over the next 25 years. This corresponds to an increase from normal to dry years of approximately 255,000 acre-feet in potential demand for supplies from Metropolitan. The level of water sales estimated in Metropolitan's adopted biennial budget and revenue requirements for fiscal years 2012-13 and 2013-14 reflect local supplies from the Los Angeles Aqueduct system and other systems at higher than normal levels based on hydrologic conditions that occurred in 2010 and 2011.

The City's Department of Water and Power has indicated that it is currently analyzing additional impacts to the Los Angeles Aqueduct's water supply deliveries of various environmental projects aimed at improving air quality and fish and riparian habitat in the Owens Valley. ~~The City's future reliance on Metropolitan supplies will be dependent on these projects and the amount of water, if any, that may be derived from sources other than Metropolitan.~~

Local Water Supplies

Local water resources include groundwater production, recycled water production and diversion of surface flows. While local water resources are non-Metropolitan sources of water supply, Metropolitan has executed agreements for storage of Metropolitan supplies in local groundwater basins and provided incentives for local supply development as described below. Member agencies and other local agencies have also independently funded and developed additional local supplies, including groundwater storage and clean-up, recycled water and desalination of brackish or high salt content water.

Metropolitan's water sales projections are based in part on projections of locally-supplied water. Projections of future local supplies are based on estimated yields from sources and projects that are currently producing water or are under construction at the time a water sales projection is made. Additional reductions in Metropolitan's water sales projections are made to account for future local supply augmentation projects, based on the 2010 IRP Update goals. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES—Water Sales Projections" and "METROPOLITAN'S WATER SUPPLY—Integrated Water Resources Plan."

Groundwater. Demands for about 1.5 million acre-feet per year, about one-third of the annual water demands for almost 18 million residents of Metropolitan's service area, are met from groundwater production. Local groundwater supplies are supported by recycled water, which is blended with imported water and recharged into groundwater basins, and also used for creating seawater barriers that protect coastal aquifers from seawater intrusion.

Groundwater Storage Programs. Metropolitan has executed agreements with a number of agencies to develop groundwater storage projects in its service area. These projects are designed to help meet the water delivery reliability goals of storing surplus imported supplies when available so that local agencies can withdraw stored groundwater during droughts or other periods of water supply shortage. In 2000, Metropolitan was allocated \$45 million in State Proposition 13 bond proceeds to develop groundwater storage projects in Metropolitan's service area. The nine projects in this program, under agreements with Long Beach, Chino Basin, Orange County Basin, Three Valleys Municipal Water District/City of La Verne, Foothill Municipal Water District, Compton and Western Municipal Water District/Elsinore Valley Municipal Water District, provide over 210,000 acre-feet of groundwater storage. The nine programs have a combined extraction capacity of over 68,000 acre-feet per year. During fiscal year 2008-09, over 70,000 acre-feet of stored water was produced and sold from these storage accounts. Fiscal year 2009-10 sales from the nine accounts totaled nearly 41,000 acre-feet, leaving a balance of approximately 26,000 acre-feet in the storage accounts. [Metropolitan began refilling the programs in fiscal year 2010-11.](#) As of July 1, 2012, the balance in the nine accounts was over 66,000 acre-feet. See table "Metropolitan's Water Storage Capacity and Water in Storage" under "METROPOLITAN'S WATER SUPPLY—Storage Capacity and Water in Storage" in this Appendix A.

Recovered Groundwater. Contamination of groundwater supplies is a growing threat to local groundwater production. Metropolitan has been supporting increased groundwater production and improved regional supply reliability by offering financial incentives to agencies for production and treatment of degraded groundwater since 1991. Metropolitan has executed agreements with local agencies to provide financial incentives to 23 projects that recover contaminated groundwater with total contract yields of about 113,000 acre-feet per year. During fiscal year 2011-12 Metropolitan provided incentives for approximately 34,000 acre-feet of recovered water under these agreements. Total groundwater recovery use under executed agreements is expected to grow to 67,000 acre-feet by 2015.

Surface Runoff. Local surface water resources consist of runoff captured in storage reservoirs and diversions from streams. Since 1980, agencies have used an average of 115,000 acre-feet per year of local surface water. Local surface water supplies are heavily influenced by year to year local weather conditions,

varying from a high of 193,000 acre-feet in fiscal year 1998-99 to a low of 65,000 acre-feet in fiscal year 2002-03.

Conjunctive Use. Conjunctive use is accomplished when groundwater basins are used to store imported supplies during water abundant periods. The stored water is used during shortages and emergencies with a corresponding reduction in surface deliveries to the participating agencies. Regional benefits include enhancing Metropolitan's ability to capture excess surface flows during wet years from both the State Water Project and Colorado River. Groundwater storage is accomplished using spreading basins, injection wells, and in-lieu deliveries where imported water is substituted for groundwater, and the groundwater not pumped is considered stored water.

Metropolitan promotes conjunctive use at the local agency level under its Replenishment Service Program by discounting rates for imported water placed into groundwater or reservoir storage during wet months. The discounted rate and program rules encourage construction of additional groundwater production facilities allowing local agencies to be more self-sufficient during shortages. (See "*Groundwater Storage Programs*" above.) In calendar year 2006, Metropolitan delivered approximately 247,000 acre-feet of water as replenishment water. In calendar year 2007, Metropolitan delivered approximately 46,000 acre-feet of water as replenishment water through May 1, 2007 then discontinued such deliveries through May 10, 2011 when Metropolitan's Board authorized sale of up to 225,000 acre-feet of discounted replenishment service deliveries to member agencies for the remainder of calendar year 2011. In calendar year 2011, Metropolitan delivered approximately 225,000 acre-feet of this discounted replenishment water. ~~Discounted~~ No replenishment deliveries are offered with the expectation of increased sales revenue; however, depending on customer demand, these increased revenues may or may not be realized sales are budgeted for fiscal year 2012-13 and thereafter. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES—Water Sales Projections." Metropolitan ~~staff~~ and the ~~its~~ member agencies are ~~currently~~ engaged in a process to develop a revised Replenishment Program for consideration by Metropolitan's Board in 2012. potential incentive-based water storage program that would encourage storing water locally and ensure regional benefits. The new approach could replace the Replenishment Service Program. See "METROPOLITAN REVENUES—Classes of Water Service—*Replenishment*" in this Appendix A.

Recycled Water. Metropolitan has supported recycled water use to offset potable water demands and improve regional supply reliability by offering financial incentives to agencies for production and sales of recycled water since 1982. Metropolitan has executed agreements with local agencies to provide financial incentives to 66 recycled water projects with total contract yields of about 338,000 acre-feet per year. During fiscal year 2011-12, Metropolitan provided incentives for approximately 162,000 acre-feet of reclaimed water under these agreements. Total recycled water use under executed agreements is expected to grow to about 186,000 acre-feet by 2015.

Seawater Desalination. Metropolitan's IRP includes seawater desalination as a core local supply and as a potential buffer supply against long-term uncertainties. To encourage local development, Metropolitan has signed Seawater Desalination Program ("SDP") incentive agreements with three of its member agencies: Long Beach, Municipal Water District of Orange County and West Basin Municipal Water District. The SDP agreements provide sliding-scale incentives of up to \$250 for each acre-foot produced after the projects are operational for 25 years or until 2040, whichever comes first. The incentives are designed to phase out if Metropolitan's rates surpass the cost of producing desalinated seawater. These agreements are subject to final approval by Metropolitan's Board after review of complete project description and environmental documentation. The three projects are in the pilot study and planning stages and are collectively anticipated to produce up to 46,000 acre-feet annually.

On November 10, 2009, Metropolitan authorized a similar SDP incentive agreement with SDCWA and nine of its local retail agencies for a proposed desalination project in Carlsbad, anticipated to produce 56,000 acre-feet per year. The Carlsbad Seawater Desalination Project (the "Carlsbad Project") is being developed by Poseidon Resources LLC. In August 2011, the SDCWA board of directors approved investigating an alternative two-party agreement under which SDCWA would purchase water directly from

the Carlsbad Project. [Negotiations between SDCWA and Poseidon Resources LLC for a potential water purchase agreement began in October 2011. The draft water purchase agreement is expected to be released for a 60 day public review and comment period in late August 2012.](#) Neither SDCWA nor Metropolitan has executed the original multi-party incentive agreement authorized by Metropolitan, as a result of SDCWA's negotiation of the alternative two-party agreement and litigation initiated by SDCWA challenging Metropolitan's rate structure that, under the agreement's terms, could have triggered proceedings for termination of the SDP incentive agreement. See "METROPOLITAN REVENUES—Litigation Challenging Rate Structure" in this Appendix A. The Carlsbad Project has obtained permits from the California Coastal Commission, State Lands Commission and San Diego Regional Water Quality Control Board for construction of the project. In June 2011, a state trial court upheld the Regional Water Quality Control Board's project approval. That decision is now before the 4th District Court of Appeal. In October 2011, Poseidon Resources LLC received initial approval from the California Pollution Control Financing Authority to sell up to \$780 million in tax-exempt private activity bonds, conditioned upon final approval of a water purchase agreement with SDCWA.

In addition to the projects in Metropolitan's incentive program, three other seawater desalination projects are under consideration that would provide supplies to Metropolitan's service area. Poseidon Resources is developing the first of these projects, a 56,000 acre-feet per year project in Huntington Beach which is currently in the permitting phase and expected to have California Coastal Commission permit hearings later in 2012. For the second project, SDCWA is studying the potential for a seawater desalination project in Camp Pendleton which would initially produce up to 56,000 acre-feet per year and up to 168,000 acre-feet per year with a phased in build out. In a third project, SDCWA completed an initial feasibility study in 2010 of a desalination project in Rosarito Beach, Mexico that could yield 28,000 to 56,000 acre-feet per year. If developed, SDCWA and potentially Metropolitan could receive a portion of the desalinated supplies either through delivery to SDCWA or through Colorado River supply exchanges with Mexico. Otay Water District, located in San Diego County along the Mexico border, is separately considering the feasibility of purchasing water from an alternative seawater desalination project at the same site in Rosarito Beach. Approvals from a number of U.S. and Mexican federal agencies, along with local approvals, would be needed for either cross-border project to proceed.

METROPOLITAN'S WATER DELIVERY SYSTEM

Method of Delivery

Metropolitan's water delivery system is made up of three basic components: the Colorado River Aqueduct, the California Aqueduct of the State Water Project and Metropolitan's internal water distribution system. Metropolitan's delivery system is integrated and designed to meet the differing needs of its member agencies. Metropolitan seeks redundancy in its delivery system to assure reliability in the event of an outage. Current system expansion and other improvements will be designed to increase the flexibility of the system. Since local sources of water are generally used to their maximum each year, growth in the demand for water is partially met by Metropolitan. Accordingly, the operation of Metropolitan's water system is being made more reliable through the rehabilitation of key facilities as needed, improved preventive maintenance programs and the upgrading of Metropolitan's operational control systems. See "CAPITAL INVESTMENT PLAN" in this Appendix A.

Colorado River Aqueduct. Work on the Colorado River Aqueduct commenced in 1933 and water deliveries started in 1941. Additional facilities were completed by 1961 to meet additional requirements of Metropolitan's member agencies. The Colorado River Aqueduct is 242 miles long, starting at the Lake Havasu intake and ending at the Lake Mathews terminal reservoir. Metropolitan owns all of the components of the Colorado River Aqueduct, which include five pump plants, 64 miles of canal, 92 miles of tunnels, 55 miles of concrete conduits and 144 underground siphons totaling 29 miles in length. The pumping plants lift the water approximately 1,617 feet over several mountain ranges to Metropolitan's service area. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct" in this Appendix A.

State Water Project. The initial portions of the State Water Project serving Metropolitan were completed in 1973. State Water Project facilities are owned and operated by DWR. Twenty-nine agencies have entered into contracts with DWR to receive water from the State Water Project. See "METROPOLITAN'S WATER SUPPLY—State Water Project" in this Appendix A.

Internal Distribution System. Metropolitan's internal water distribution system includes components that were built beginning in the 1930s and through the present. Metropolitan owns all of these components, including 14 dams and reservoirs, five regional treatment plants, over 800 miles of transmission pipelines, feeders and canals, and 16 hydroelectric plants with an aggregate capacity of 131 megawatts.

Diamond Valley Lake. Diamond Valley Lake, a man-made reservoir located southwest of the city of Hemet, California, covers approximately 4,410 acres and has capacity to hold approximately 810,000 acre-feet or 265 billion gallons of water. Diamond Valley Lake was constructed to serve approximately 90 percent of Metropolitan's service area by gravity flow. Associated hydraulic structures consist of an inlet-outlet tower, pumps and generating facilities, a pressure control facility, connecting tunnels and a forebay. Imported water is delivered to Diamond Valley Lake during surplus periods. The reservoir provides more reliable delivery of imported water from the State Water Project and the Colorado River Aqueduct during summer months, droughts and emergencies. In addition, Diamond Valley Lake is capable of providing more than one-third of Southern California's water needs from storage for approximately six months after a major earthquake (assuming that there has been no impairment of Metropolitan's internal distribution network). See the table "Metropolitan's Water Storage Capacity and Water in Storage" under "METROPOLITAN'S WATER SUPPLY—Storage Capacity and Water in Storage" in this Appendix A for the amount of water in storage at Diamond Valley Lake. Excavation at the project site began in May 1995. Diamond Valley Lake was completed in March 2000, at a total cost of \$2 billion, and was in full operation in December 2001.

Inland Feeder. The Inland Feeder is a 44-mile-long conveyance system that connects the State Water Project to Diamond Valley Lake and the Colorado River Aqueduct. The Inland Feeder provides greater flexibility in managing Metropolitan's major water supplies and allows greater amounts of State Water Project water to be accepted during wet seasons for storage in Diamond Valley Lake. In addition, the Inland Feeder increases the conveyance capacity from the East Branch of the State Water Project by 1,000 cubic-feet per second ("cfs"), allowing the East Branch to operate up to its full capacity. Construction of the Inland Feeder was completed in September 2009 at a total cost of \$1.14 billion.

Operations Control Center. Metropolitan's water conveyance and distribution system operations are coordinated from the Operations Control Center ("OCC") located in the Eagle Rock area of Los Angeles. The OCC plans, balances and schedules daily water and power operations to meet member agencies' demands, taking into consideration the operational limits of the entire system.

Water Treatment

Metropolitan filters and disinfects water at five water treatment plants: the F.E. Weymouth Treatment Plant, the Joseph Jensen Treatment Plant, the Henry J. Mills Treatment Plant, the Robert B.

Diemer Treatment Plant and the Robert A. Skinner Treatment Plant. The plants treat an average of between 1.7 billion and 2.0 billion gallons of water per day, and have a maximum capacity of approximately 2.6 billion gallons per day. Approximately 70 percent of Metropolitan's water deliveries are treated water.

Federal and state regulatory agencies continually monitor and establish new water quality standards. New water quality standards could affect availability of water and impose significant compliance costs on Metropolitan. The Safe Drinking Water Act ("SDWA") was amended in 1986 and again in 1996. The SDWA establishes drinking water quality standards, monitoring, public notification and enforcement requirements for public water systems. To achieve these objectives, the U.S. Environmental Protection Agency ("USEPA"), as the lead regulatory authority, promulgates national drinking water regulations and develops the mechanism for individual states to assume primary enforcement responsibilities. The California Department of Public Health ("CDPH"), formerly known as the Department of Health Services, has lead authority over California water agencies. Metropolitan continually monitors new water quality laws and regulations and frequently comments on new legislative proposals and regulatory rules.

In October 2007, Metropolitan began adding fluoride to treated water at all five of its treatment plants for regional compliance with Assembly Bill 733, enacted in 1995, which requires fluoridation of any public water supply with over 10,000 service connections in order to prevent tooth decay, subject to availability of sufficient funding. Design and construction of the fluoridation facilities at Metropolitan's five treatment plants were funded primarily by a \$5.5 million grant from the California Dental Association Foundation, in conjunction with the California Fluoridation 2010 Work Group. On August 9, 2011, four individuals filed litigation (*Foli, et al. v. Metropolitan Water District of Southern California, et al.*) in federal district court alleging deprivation of civil rights, impairment of civil rights and unfair competition based on fluoridation of Metropolitan's treated water deliveries. On April 10, 2012 the court granted Metropolitan's motion to dismiss the case without prejudice. Plaintiffs filed a first amended complaint on April 24, 2012. Metropolitan's motion to dismiss is pending before the court.

Disinfection By-products. As part of the requirements of the SDWA, USEPA is required to establish regulations to strengthen protection against microbial contaminants and reduce potential health risks from disinfection by-products. Disinfectants and disinfection by-products ("D/DBPs") were addressed by the USEPA in two stages. In the Stage 1 Disinfectants and Disinfection Byproducts Rule ("Stage 1 DBPR"), the maximum contaminant level ("MCL") for one of the classes of D/DBPs, total trihalomethanes ("TTHM"), was lowered from 100 parts per billion ("ppb") to 80 ppb. MCLs were also set for haloacetic acids ("HAA") and bromate (an ozone D/DBP). In addition, the Stage 1 DBPR includes a treatment requirement to remove disinfection by-product precursors. Compliance with these requirements started in January 2002. Metropolitan already satisfied these requirements for its Colorado River Water, which has lower levels of disinfection by-product precursors than State Water Project water. State Water Project water has a greater amount of disinfection by-product precursors and modifications to the treatment process have been made to meet the requirements of the Stage 1 DBPR. Longer-term D/DBP control has been achieved by switching to ozone as the primary disinfectant at the Mills and Jensen treatment plants, which only receive water from the State Water Project. Ozone facilities at the Mills plant began operating in October 2003. Ozone facilities became operational at the Jensen plant on July 1, 2005. Ozone facilities at the Skinner plant were substantially completed in December 2009 and became operational in 2010. Metropolitan's Board has also approved installing ozonation processes at the Weymouth and Diemer treatment plants, which receive a blend of water from the State Water Project and the Colorado River and installation is underway. See "CAPITAL INVESTMENT PLAN—Major Projects of Metropolitan's Capital Investment Plan" in this Appendix A. Ozone will enable these plants to reliably treat water containing higher blends of State Project water and still meet the new microbial and D/DBP standards.

The second stage of the D/DBP Rule ("Stage 2 DBPR") was finalized in January 2006. The Stage 2 DBPR requires water systems to meet the TTHM and HAA standards at individual monitoring locations in the distribution system as opposed to a distribution system-wide average under the Stage 1 DBPR.

Metropolitan does not anticipate any further capital improvements in order to meet the Stage 2 DBPR requirements.

The Interim Enhanced Surface Water Treatment Rule and the Long Term 2 Enhanced Surface Water Treatment Rule ("LT2ESWTR") have been implemented to simultaneously provide protection against microbial pathogens while the D/DBP rules provide reduced risk from disinfection by-products. Metropolitan does not anticipate any further capital improvements in order to meet the LT2ESWTR requirements.

Perchlorate. Perchlorate, used in solid rocket propellants, munitions and fireworks, has contaminated some drinking water wells and surface water sources throughout California. Perchlorate also has been detected in Metropolitan's Colorado River water supplies. A chemical manufacturing facility near Lake Mead in Nevada is a primary source of the contamination. Remediation efforts began in 1998 and have been successful at meeting the cleanup objectives, significantly reducing the levels of perchlorate entering into the Colorado River. CDPH has established a primary drinking water standard (i.e., an MCL) of 6 ppb for perchlorate. Current perchlorate levels in Metropolitan's Colorado River supplies are below 2 ppb.

Chromium 6. Hexavalent chromium or chromium 6 is the relatively more harmful form of chromium. The public health standard for "total" chromium, which includes chromium 6, is a MCL of 50 ppb. There is currently no specific MCL for chromium 6. Chromium 6 in Metropolitan's source waters has ranged from non-detect (less than 0.03 ppb) to under 0.5 ppb. On July 27, 2011 the California Office of Environmental Health Hazard Assessment ("OEHHA") released a public health goal ("PHG") of 0.02 ppb for chromium 6. Following public comment periods and workshops, the CDPH can proceed with final development of a MCL for chromium 6 and must set the state MCL as close to the PHG as is technologically and economically feasible. It is expected that the adoption of a chromium 6 regulation will not materially affect the water supply to Metropolitan or result in significant compliance costs.

Arsenic. The federal and state MCL for arsenic in drinking water is 10 ppb. Arsenic levels in Metropolitan's treated water supplies ranged from not detected (less than 2 ppb) to 2.3 ppb in 2011.

Seismic Considerations

General. Although the magnitude of damages resulting from a significant seismic event are impossible to predict, Metropolitan's water conveyance and distribution facilities are designed to either withstand a maximum probable seismic event or to minimize the potential repair time in the event of damage. The five pumping plants on the Colorado River Aqueduct have been buttressed to better withstand seismic events. Other components of the Colorado River Aqueduct are monitored for any necessary rehabilitation and repair. Metropolitan personnel and independent consultants periodically reevaluate the internal water distribution system's vulnerability to earthquakes. As facilities are evaluated and identified for seismic retrofitting, they are prioritized, with those facilities necessary for delivering or treating water scheduled for upgrade before non-critical facilities. However, major portions of the California Aqueduct and the Colorado River Aqueduct are located near major earthquake faults, including the San Andreas Fault. A significant earthquake could damage structures and interrupt the supply of water, adversely affecting Metropolitan's revenues and its ability to pay its obligations. Therefore, emergency supplies are stored for use throughout Metropolitan's service area, and a six-month reserve supply of water normally held in local storage (including emergency storage in Diamond Valley Lake) provides reasonable assurance of continuing water supplies during and after such events.

Metropolitan has an ongoing surveillance program that monitors the safety and structural performance of its 14 dams and reservoirs. Operating personnel perform regular inspections that include monitoring and analyzing seepage flows and pressures. Engineers responsible for dam safety review the inspection data and monitor the horizontal and vertical movements for each dam. Major on-site inspections are performed at least twice each year. Instruments to transmit seismic acceleration time histories for

analysis any time a dam is subjected to strong motion during an earthquake are located at a number of selected sites.

In addition, Metropolitan has developed an emergency plan that calls for specific levels of response appropriate to an earthquake's magnitude and location. Included in this plan are various communication tools as well as a structured plan of management that varies with the severity of the event. Pre-designated personnel follow detailed steps for field facility inspection and distribution system patrol. Approximately 40 employees are designated to respond immediately under certain identifiable seismic events. An emergency operations center is maintained at the OCC. The OCC, which is specifically designed to be earthquake resistant, contains communication equipment, including a radio transmitter, microwave capability and a response line linking Metropolitan with its member agencies, DWR, other utilities and the State's Office of Emergency Services. Metropolitan also maintains machine, fabrication and coating shops at its facility in La Verne, California. Materials to fabricate pipe and other appurtenant fittings are kept in inventory at the La Verne site. In the event of earthquake damage, Metropolitan has taken measures to provide the design and fabrication capacity to fabricate pipe and related fittings. Metropolitan is also staffed to perform emergency repairs and has pre-qualified contractors for emergency repair needs at various locations throughout Metropolitan's service area.

State Water Project Facilities. The California Aqueduct crosses all major faults either by canal at ground level or by pipeline at very shallow depths to ease repair in case of damage from movement along a fault. State Water Project facilities are designed to withstand major earthquakes along a local fault or magnitude 8.1 earthquakes along the San Andreas Fault without major damage. Dams, for example, are designed to accommodate movement along their foundations and to resist earthquake forces on their embankments. Earthquake loads have been taken into consideration in the design of project structures such as pumping and power plants. The location of check structures on the canal allows for hydraulic isolation of the fault-crossing repair.

While the dams, canals, pump stations and other constructed State Water Project facilities have been designed to withstand earthquake forces, the critical supply of water from Northern California must traverse the Bay-Delta through hundreds of miles of varying levels of engineered levees that are susceptible to major failures due to flood and seismic risk. In the event of a failure of the Bay-Delta levees, the quality of the Bay-Delta's water could be severely compromised as salt water comes in from the San Francisco Bay. Metropolitan's supply of State Water Project water would be adversely impacted if pumps that move Bay-Delta water southward to the Central Valley and Southern California are shut down to contain the salt water intrusion. Metropolitan estimates that stored water supplies, Colorado River Aqueduct supplies and local water resources that would be available in case of a levee breach or other interruption in State Water Project supplies would meet demands in Metropolitan's service area for approximately twelve months. See "METROPOLITAN'S WATER SUPPLY—Storage Capacity and Water in Storage" in this Appendix A. Since the State and Federal governments control the Bay-Delta levees, repair of any levee failures would be the responsibility of and controlled by the State and Federal governments.

Metropolitan, in cooperation with the State Water Contractors, developed recommendations to DWR for emergency preparedness measures to maintain continuity in export water supplies and water quality during emergency events. These measures include improvements to emergency construction materials stockpiles in the Bay-Delta, improved emergency contracting capabilities, strategic levee improvements and other structural measures of importance to Bay-Delta water export interests, including development of an emergency freshwater pathway to export facilities in a severe earthquake. DWR utilized \$12 million in fiscal year 2007-08 for initial stockpiling of rock for emergency levee repairs and development of Bay-Delta land and marine loading facilities and has identified future funding for expanded stockpiles.

Perris Dam. DWR reported in July 2005 that seismic studies indicate that DWR's Perris Dam facility could sustain damage from moderate earthquakes along the San Jacinto or San Andreas faults due to

potential weaknesses in the dam's foundation. The studies used technology not available when the dam was completed in 1974. Perris Dam forms Lake Perris, the terminal reservoir for the State Water Project in Riverside County, with maximum capacity of approximately 130,000 acre-feet of water. In late 2005, DWR lowered the water level in the reservoir by about 25 feet and reduced the amount of water stored in the reservoir to about 75,000 acre-feet as DWR evaluates alternatives for repair of the dam. The lower lake level elevation was intended to prevent over-topping of the dam crest in the event of a major earthquake and to prevent uncontrolled releases. In December 2006, DWR completed a study identifying various repair options, began additional geologic exploration along the base of Perris Dam and started preliminary design. DWR's preferred alternative is to repair the dam to restore the reservoir to its historical level. DWR estimates that such repairs will cost between \$340 million and \$460 million and take four to eight years to complete, once commenced. DWR released its draft EIR in January 2010 and final EIR in September 2011. On November 11, 2011, DWR certified the final EIR and filed a Notice of Determination stating its intent to proceed with the preferred alternative. Water stored in Lake Perris is used primarily by Metropolitan. Accordingly, DWR is likely to look to Metropolitan to be a major contributor toward the cost of repair of Perris Dam under Metropolitan's State Water Contract. However, Metropolitan believes that the preferred alternative primarily benefits recreation and, as such, that the bulk of any repair costs should be borne by the state. See "METROPOLITAN EXPENDITURES—State Water Contract Obligations" in this Appendix A.

Security Measures

Metropolitan conducts ground and air patrols of the Colorado River Aqueduct and monitoring and testing at all treatment plants and along the Colorado River Aqueduct. Similarly, DWR has in place security measures to protect critical facilities of the State Water Project, including both ground and air patrols of the State Water Project.

Although Metropolitan has constructed redundant systems and other safeguards to ensure its ability to continually deliver water to its customers, and DWR has made similar efforts, a terrorist attack or other security breach against water facilities could materially impair Metropolitan's ability to deliver water to its customers, its operations and revenues and its ability to pay its obligations.

CAPITAL INVESTMENT PLAN

General Description

Metropolitan's current Capital Investment Plan (the "Capital Investment Plan" or "CIP") involves expansion and rehabilitation of existing facilities and construction of new facilities to provide for resource development, meet future water demands, ensure system reliability as well as enhance operational efficiency, and comply with water quality regulations. Metropolitan's CIP is regularly reviewed and updated. Implementation and construction of specific elements of the program are subject to Board approval, and the amount and timing of borrowings will depend upon, among other factors, status of construction activity and water demands within Metropolitan's service area. From time to time projects that have been undertaken are delayed, redesigned or deferred by Metropolitan for various reasons and no assurance can be given that a project in the CIP will be completed in accordance with its original schedule or that any project will be completed as currently planned.

Projection of Capital Investment Plan Expenditures

The table below sets forth projected CIP expenditures, including replacement and refurbishment expenditures, by project type for the fiscal years ending June 30, 2013 through 2017. The requirements of the CIP from fiscal year 2012-13 through fiscal year 2016-17 are estimated to be approximately \$1.45 billion in escalated dollars. This estimate is updated annually as a result of the periodic review and revision of the CIP. See "HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES" in this Appendix A.

**CAPITAL INVESTMENT PLAN
PROJECTION OF EXPENDITURES⁽¹⁾
(Fiscal Years Ended June 30 - Dollars in Thousands)**

	2013	2014	2015	2016	2017	Total
<u>Cost of Service</u>						
Source of Supply	\$ 347	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ 347
Conveyance & Aqueduct	49,323	37,454	27,124	9,710	2,000	125,611
Storage	8,268	8,001	5,752	8,239	9,599	39,859
Distribution	35,201	42,734	54,827	70,509	82,548	285,819
Treatment	131,722	163,269	208,627	193,812	171,820	869,250
Administrative & General	24,999	21,158	22,171	14,992	5,493	88,813
Hydroelectric	7,429	21,989	3,533	1,216	5,715	39,882
Total⁽²⁾	\$257,289	\$294,605	\$322,034	\$298,478	\$277,175	\$1,449,581

Source: Metropolitan.

- (1) Fiscal year 2012-13 through 2016-17 based on the adopted biennial budget for fiscal years 2012-13 and 2013-14. Totals are rounded.
- (2) Annual totals include replacement and refurbishment expenditures for fiscal years 2012-13 through 2016-17 of \$132 million, \$154 million, \$127 million, \$184 million, and \$200 million, respectively, for a total of \$797 million for fiscal years 2012-13 through 2016-17.

The above projections do not include amounts for contingencies, but include escalation at 2.77 percent per year for projects for which formal construction contracts have not been awarded. Additional capital costs may arise in the future as a result of, among other things, federal and State water quality regulations, project changes and mitigation measures necessary to satisfy environmental and regulatory requirements, and for additional facilities. See "METROPOLITAN'S WATER DELIVERY SYSTEM—Water Treatment" above.

Capital Investment Plan Financing

The CIP will require significant funding from debt financing (see "HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES" in this Appendix A) as well as from pay-as-you-go funding. The Board has adopted an internal funding objective to fund all capital program expenditures required for replacements and refurbishments of Metropolitan facilities from current revenues. However, in order to reduce drawdowns of reserve balances and to mitigate financial risks that could occur in upcoming years, actual and projected pay-as-you-go funding has been ~~and is anticipated to be~~ less than ~~budgeted~~ projected amounts during fiscal years 2007-08 through 2012-13. During this period, pay-as-you-go funding is now expected to be \$256 million, rather than the \$521 million originally ~~budgeted~~ projected for this period. As in prior years, these amounts may be reduced or increased by the Board during the fiscal year. To limit the accumulation of cash and investments in the Replacement and Refurbishment Fund, the maximum balance in this fund at the end of each fiscal year will be \$95 million. Amounts above the \$95 million limit will be transferred to the Revenue Remainder Fund and may be used for any lawful purpose. The remainder of capital program expenditures will be funded through the issuance from time to time of water revenue bonds, which are payable from Net Operating Revenues. Metropolitan expects to issue additional water revenue bonds to fund the CIP in the amount of \$180 million in fiscal year 2012-13, \$180 million in fiscal year 2013-14, \$200 million in fiscal year 2014-15, \$180 million in fiscal year 2015-16 and \$190 million in fiscal year 2016-17. See "METROPOLITAN EXPENDITURES—Revenue Bond Indebtedness" in this Appendix A.

Major Projects of Metropolitan's Capital Investment Plan

Oxidation Retrofit Facilities. The oxidation retrofit facilities program includes the design and construction of oxidation facilities and appurtenances at all of Metropolitan's treatment plants. This program is intended to allow Metropolitan to meet drinking water standards for disinfection by-products and reduce taste and odor incidents. The first phase of the oxidation retrofit program, at Metropolitan's Henry J. Mills Treatment Plant in Riverside County, was completed in 2003. Oxidation retrofit at the Joseph Jensen Treatment Plant was completed July 1, 2005. The cost for these two projects was approximately \$236.4 million. Oxidation retrofit at the Robert A. Skinner plant was substantially completed in December 2009 and operational in 2010, with follow-up work expected for completion in December 2012. Expenditures at the Skinner plant through June 2012 were \$242.2 million. Total oxidation program costs at the Skinner plant are estimated to be \$245.5 million. Construction of the oxidation retrofit facilities at the Robert B. Diemer Treatment Plant was 97 percent complete in June 2012. Program expenditures at the Diemer plant through June 2012 were \$339.2 million and the total program cost is projected to be \$372.9 million. Oxidation program costs at the F.E. Weymouth plant, based upon the adopted budget, are estimated to be \$338.5 million. Expenditures at the Weymouth plant through June 2012 were \$70.5 million and completion is expected in fiscal year 2016-17.

F.E. Weymouth Treatment Plant Improvements. The F.E. Weymouth Treatment Plant was built in 1938 and subsequently expanded several times over the following 25 years. It is Metropolitan's oldest water treatment facility. Metropolitan has completed several upgrades and refurbishment/replacement projects to maintain the plant's reliability and improve its efficiency. These include power systems upgrades, a residual solids dewatering facility, refurbishment/replacement of the mechanical equipment in two of the eight flocculation and settling basins, a new plant maintenance facility, new chemical feed systems and storage tanks, replacement of the plant domestic/fire water system, seismic upgrades to the plant inlet structure, and a new chlorine handling and containment facility. Planned projects over the next several years include refurbishment of the plant's filters and settling basins, seismic retrofits to the filter buildings and administration building, and replacement of the valves used to control filter operation. The current cost estimate for all prior and projected improvements at the Weymouth plant, not including the ozone facilities, is approximately \$452 million, with \$176.2 million spent through June 2012. Budgeted aggregate capital expenditures for improvements at the Weymouth plant for fiscal years 2012-13 and 2013-14 are \$40.3 million.

Robert B. Diemer Treatment Plant Improvements. The Robert B. Diemer Treatment Plant was built in 1963 and subsequently expanded in 1968. It is Metropolitan's second oldest water treatment facility and has a capacity to treat 520 million gallons of water a day. Several upgrades and refurbishment/replacement projects have been completed at the Diemer plant, including power system upgrades, a new residual solids dewatering facility, new vehicle and plant maintenance facilities, new chemical feed systems and storage tanks, a new chlorine handling and containment facility, construction of a roller-compacted concrete slope stabilization system and a new secondary access road. The current cost estimate for all prior and projected improvements at the Diemer Treatment Plant, not including the ozone facilities, is approximately \$445.2 million, with \$167.6 million spent through June 2012. Budgeted aggregate capital expenditures for improvements at the Diemer plant for fiscal years 2012-13 and 2013-14 are \$34.4 million.

Colorado River Aqueduct Facilities. Deliveries through the Colorado River Aqueduct began in 1941. Through annual inspections and maintenance activities, the performance and reliability of the various components of the Colorado River Aqueduct are regularly evaluated. A major overhaul of the pump units at the five pumping plants was completed in 1988. Refurbishment or replacement of many of the electrical system components, including the transformers, circuit breakers and motor control centers, is currently under way. Projects completed over the past 10 years include replacement of high voltage circuit breakers and transformers at the five pumping plant switchyards, refurbishment of operators and power centers on the head gates downstream of the pumping plants, refurbishment/replacement of 15 isolation/control gates, replacement of cast iron pipe and other components at over 200 outlet structures with stainless steel

components, replacement of pumping plant inlet trash racks, and replacement of several miles of deteriorated concrete canal liner. Additionally, many of the mechanical components at the pumping plants as well as the Copper Basin and Gene Wash Reservoirs will be evaluated and replaced or refurbished over the next few years. The currently projected cost estimate for all prior and planned refurbishment or replacement projects-~~currently projected~~ is \$285.8 million. Costs through June 2012 were \$135.1 million. Budgeted aggregate capital expenditures for improvements on the Colorado River Aqueduct for fiscal years 2012-13 and 2013-14 are \$74.1 million.

GOVERNANCE AND MANAGEMENT

Board of Directors

Metropolitan is governed by a 37-member Board of Directors. Each member public agency is entitled to have at least one representative on the Board, plus an additional representative for each full five percent of the total assessed valuation of property in Metropolitan's service area that is within the member public agency. Changes in relative assessed valuation do not terminate any director's term. Accordingly, the Board may, from time to time, have more than 37 directors.

The Board includes business, professional and civic leaders. Directors serve on the Board without compensation from Metropolitan. Voting is based on assessed valuation, with each member agency being entitled to cast one vote for each \$10 million or major fractional part of \$10 million of assessed valuation of property within the member agency, as shown by the assessment records of the county in which the member agency is located. The Board administers its policies through the Metropolitan Water District Administrative Code (the "Administrative Code"), which was adopted by the Board in 1977. The Administrative Code is periodically amended to reflect new policies or changes in existing policies that occur from time to time.

Management

Metropolitan's day-to-day management is under the direction of its General Manager, who serves at the pleasure of the Board, as do Metropolitan's General Counsel, General Auditor and Ethics Officer. Following is a biographical summary of Metropolitan's principal executive officers.

Jeffrey Kightlinger, General Manager – Mr. Kightlinger was appointed as General Manager in February 2006, leaving the position of General Counsel, which he had held since February 2002. Before becoming General Counsel, Mr. Kightlinger was a Deputy General Counsel and then Assistant General Counsel, representing Metropolitan primarily on Colorado River matters, environmental issues, water rights and a number of Metropolitan's water transfer and storage programs. Prior to joining Metropolitan in 1995, Mr. Kightlinger worked in private practice representing numerous public agencies including municipalities, redevelopment agencies and special districts. Mr. Kightlinger earned his bachelor's degree in history from the University of California, Berkeley, and his law degree from Santa Clara University.

Marcia Scully, General Counsel – Ms. Scully assumed the position of General Counsel in March 2012. She previously served as Metropolitan's Interim General Counsel from March 2011 to March 2012. Ms. Scully joined Metropolitan in 1995, after a decade of private law practice, providing legal representation to Metropolitan on construction, employment, Colorado River and significant litigation matters. From 1981 to 1985 she was assistant city attorney for the City of Inglewood. Ms. Scully served as president of University of Michigan's Alumnae Club of Los Angeles and is a recipient of the 1996 State Bar of California, District 7 President's Pro Bono Service Award and the Southern California Association of Non-Profit Housing Advocate of the Year Award. She is also a member of the League of Women Voters for Whittier and was appointed for two terms on the City of Whittier's Planning Commission, three years of which were served as chair. Ms. Scully earned a bachelor's degree in liberal arts from the University of Michigan, a master's degree in urban planning from Wayne State University and law degree from Loyola Law School.

Gerald C. Riss, General Auditor – Mr. Riss was appointed as Metropolitan's General Auditor in July 2002 and is responsible for the independent evaluation of the policies, procedures and systems of control throughout Metropolitan. Mr. Riss is a certified fraud examiner, certified financial services auditor and certified risk professional with more than 25 years of experience in accounting, audit and risk management. Prior to joining Metropolitan, Mr. Riss was Vice President and Assistant Division Head of Risk Management Administration at United California Bank/Bank of the West. He also served as Senior Vice President, director of Risk Management and General Auditor of Tokai Bank of California from 1988 until its reorganization as United California Bank in 2001. He earned a bachelor's degree in accounting and master's degree in business administration from Wayne State University in Detroit, Michigan.

Jeffrey L. Cable, Interim Ethics Officer – Mr. Cable was appointed as Interim Ethics Officer in March 2012. He has served as an ethics educator at Metropolitan since 2005. Prior to joining Metropolitan, Mr. Cable was a senior trainer for United Resources International Business Consultants in Taipei, Taiwan from 2002 to 2005 and taught an applied ethics course at the University of Montana in 2001. A certified ethics officer from the Society of Corporate Compliance and Ethics, Mr. Cable has also completed meditation training at the Loyola Law School Center for Conflict Resolution. He is a member of the Association for Practical and Professional Ethics, Ethics and Compliance Office Association, Southern California Business Ethics Roundtable and the Society of Corporate Compliance and Ethics. Mr. Cable earned a master's degree in philosophy and bachelor's degree in human resources management and interpersonal communications from the University of Montana.

Gary Breaux, Assistant General Manager/Chief Financial Officer – Mr. Breaux has had extensive experience working for local governments since 1983. From 1994 until joining Metropolitan, he served as Director of Finance for East Bay Municipal Utility District (EBMUD). At EBMUD, he was responsible for all financial areas, including treasury operations, debt management, rates, internal audit, accounting and reporting, risk management and customer and community services. Prior to joining EBMUD, he was Director of Finance for the City of Oakland, California. A native of Colorado, Mr. Breaux received a Bachelor of Science degree in Business from the University of Colorado in 1977 and a Masters degree in Public Administration in 1987 from Virginia Commonwealth University. He is a Certified Public Accountant. Mr. Breaux is a member of the American Water Works Association and the American Institute of Certified Public Accountants.

Debra Man, Assistant General Manager/Chief Operating Officer – Ms. Man was appointed to this position on December 15, 2003. Ms. Man has worked at Metropolitan since 1986, beginning as an engineer and advancing to Chief of the Planning and Resources Division. As Chief of Planning and Resources she was responsible for major initiatives adopted by Metropolitan's Board, such as the Integrated Water Resources Plan, rate structure, and facility plans for expansion of Metropolitan's distribution system. In 1999, she was appointed as Vice President of Water Transfers and Exchanges, responsible for securing water supplies through agreements and partnerships with other water and agricultural interests in San Joaquin Valley and Southern California and demonstrating Metropolitan's water supply reliability in compliance with current laws. Ms. Man is a registered professional civil engineer in California and Hawaii. She has a master's degree in civil/environmental engineering from Stanford University and a bachelor's degree in civil engineering from the University of Hawaii.

Roger Patterson, Assistant General Manager/Strategic Initiatives – Mr. Patterson was appointed Assistant General Manager in March 2006. He is responsible for overseeing water supply and planning issues, including the Colorado River and State Water Project. He previously served as a consultant to Metropolitan on Colorado River issues. Mr. Patterson was the director of the Nebraska Department of Natural Resources from 1999 to 2005, where he was responsible for water administration, water planning, flood-plain delineation, dam safety and the state databank. Prior to his work in Nebraska, Mr. Patterson

spent 25 years with the Bureau of Reclamation, retiring from the Bureau as the Regional Director for the Mid-Pacific Region. He is a registered professional engineer in Nebraska and Colorado, and earned bachelor's and master's degrees in engineering from the University of Nebraska.

Gilbert F. Ivey, Assistant General Manager/Chief Administrative Officer – Mr. Ivey is the Chief Administrative Officer and is responsible for human resources, real property management, strategic land development and Metropolitan's small business program. Mr. Ivey has been with Metropolitan for 40 years, starting as a summer trainee in the Engineering Division. He has held various positions in Finance, Right-of-Way and Land, Operation, Human Resources and Executive Offices. He earned a bachelor's degree in business administration from California State University, Dominguez Hills and holds various professional designations and certifications in management from Pepperdine University and the University of Southern California.

Linda Waade, Deputy General Manager/External Affairs – Ms. Waade is responsible for Metropolitan's communications, outreach, education and legislative matters. Prior to joining Metropolitan in August 2006, she coordinated government and community affairs for the Los Angeles office of CH2M Hill, Inc., where she provided counsel on policy development and outreach strategies for environmental and public works projects. She also maintained her own consulting firm, Waade Partners Consulting. Ms. Waade was deputy chief of staff and policy director for then Los Angeles City Councilmember Antonio R. Villaraigosa from July 2003 to January 2004. She served as transportation policy advisor for Los Angeles Mayor Tom Bradley from 1991-93, as chief of staff for U.S. Congressman Mel Levine in his Los Angeles district office from 1988-89 and as the congressman's special assistant for environmental affairs from 1987-88, and was executive director of the Coalition for Clean Air, a statewide advocacy organization dedicated to air quality issues, from 1994-98. Ms. Waade earned a bachelor's degree in political science from California State University at Los Angeles. She is a past recipient of the "Environmental Leadership Award" from the California League of Conservation Voters.

Employee Relations

The total number of regular full-time Metropolitan employees on ~~July 30,~~ August 15, 2012 was ~~1,765,~~ 1,763, of whom ~~1,233,~~ 1,236 were represented by AFSCME Local 1902, 100 by the Supervisors Association, ~~275,~~ 272 by the Management and Professional Employees Association and ~~102,~~ 101 by the Association of Confidential Employees. The remaining ~~554~~ employees are unrepresented. The four bargaining units represent 97 percent of Metropolitan's employees. The Memorandum of Understanding ("MOU") with the Association of Confidential Employees covers the period January 1, 2011 through December 31, 2015. The MOUs with the Management and Professional Employees Association and with AFSCME Local 1902 cover the period January 1, 2011 to December 31, 2016. The MOU with the Supervisors Association covers the period September 13, 2011 to December 31, 2016.

Risk Management

Metropolitan is exposed to various risks of loss related to the design, construction, treatment and delivery of water. With the assistance of third party claims administrators, Metropolitan is self-insured for liability, property and workers' compensation. Metropolitan self-insures the first \$25 million per liability occurrence, with commercial liability coverage of \$75 million in excess of the self-insured retention. The \$25 million self-insured retention is maintained as a separate restricted reserve. Metropolitan is also self-insured for loss or damage to its property, with the \$25 million self-insured retention also being accessible for emergency repairs and Metropolitan property losses. In addition, Metropolitan obtains other excess and specialty insurance coverages such as directors' and officers' liability, fiduciary liability and aircraft hull and liability coverage.

Metropolitan self-insures the first \$5 million for workers' compensation with excess coverage of \$50 million. Metropolitan separately funds remaining workers' compensation and general liability claims arising

from the Diamond Valley Lake and early portions of the Inland Feeder construction projects, which were insured through Owner Controlled Insurance Programs ("OCIPs"). The OCIPs for those projects have been concluded. The costs to settle and close the remaining claims for the Diamond Valley Lake and Inland Feeder construction projects are estimated to be \$1 million and \$300,000, respectively.

The self-insurance retentions and reserve levels currently maintained by Metropolitan may be modified by Metropolitan's Board at its sole discretion.

METROPOLITAN REVENUES

General

Until water deliveries began in 1941, Metropolitan's activities were, by necessity, supported entirely through the collection of *ad valorem* property taxes. Since the mid-1980s, water sales revenues have provided approximately 75 to 80 percent of total revenues and *ad valorem* property taxes have accounted for about 10 percent of revenues, while the remaining revenues have been derived principally from the sale of hydroelectric power, interest on investments and additional revenue sources (water standby charges and availability of service charges) beginning in 1993. *Ad valorem* taxes do not constitute a part of Operating Revenues and are not available to make payments with respect to the water revenue bonds issued by Metropolitan. *Ad valorem* taxes are applied solely to the payment of principal and interest on Metropolitan's outstanding general obligation bonds and a portion of State Water Contract payments.

The basic rate for untreated water for domestic and municipal uses increased from \$8 per acre-foot in fiscal year 1941-42 to the rate of \$527 per acre-foot for Tier 1 water, effective January 1, 2011. The *ad valorem* tax rate for Metropolitan purposes has gradually been reduced from a peak equivalent rate of 0.1250 percent of full assessed valuation in fiscal year 1945-46 to 0.0037 percent of full assessed valuation for fiscal year 2011-12. See "—Rate Structure" below. The rates charged by Metropolitan represent the wholesale cost of Metropolitan water to its member agencies, and not the cost of water to the ultimate consumer. Metropolitan does not exercise control over the rates charged by its member agencies or their subagencies to their customers.

Summary of Receipts by Source

The following table sets forth Metropolitan's sources of receipts for the five fiscal years ended June 30, 2012. The table provides cash basis information, which is unaudited. Audited financial statements for the fiscal years ended June 30, 2011 and June 30, 2010 are provided in Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT AND FINANCIAL STATEMENTS AS OF FISCAL YEARS ENDED JUNE 30, 2011 AND JUNE 30, 2010 AND BALANCE SHEETS AND STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS AS OF AND FOR THE NINE MONTHS ENDED MARCH 31, 2012 AND MARCH 31, 2011 (UNAUDITED)."

SUMMARY OF RECEIPTS BY SOURCE⁽¹⁾
Fiscal Years Ended June 30
(Dollars in Millions)

	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Water Sales ⁽²⁾	\$ 967.8	\$988.1	\$1,011.1	\$ 995.6	\$ 1,090.0
Net Tax Collections ⁽³⁾	100.4	105.2	97.3	88.0	90.1
Additional Revenue Sources ⁽⁴⁾	114.0	119.7	135.3	153.5	167.1
Interest on Investments	60.3	33.7	26.7	18.9	17.8
Hydroelectric Power Sales	41.1	22.5	18.8	22.1	31.0
Other Collections & Trust Funds	<u>8.1</u>	<u>3.1</u>	<u>9.1</u>	<u>61.0⁽⁵⁾</u>	<u>26.1</u>
Total Receipts	\$1,291.7	\$1,272.3	\$1,298.3	\$1,339.1	\$1,342.1 <u>1,422.1</u>

Source: Metropolitan.

- (1) Does not include any proceeds from the sale of bonded indebtedness.
- (2) Gross receipts in each year are for sales in the twelve months ended April 30 of such year. Water sales revenues include revenues from water wheeling and exchanges. See "METROPOLITAN REVENUES—Wheeling and Exchange Charges." Includes \$25.7 million in fiscal year 2010-11, from the Calleguas Municipal Water District related to termination of the Las Posas water storage program. In fiscal year 2011-12, includes \$27.5 million from CVWD for delivery of 105,000 acre-feet under an exchange agreement between Metropolitan and CVWD.
- (3) *Ad valorem* taxes levied by Metropolitan are applied solely to the payment of outstanding general obligation bonds of Metropolitan and a portion of State Water Contract payments.
- (4) Includes receipts derived from water standby charges, readiness-to-serve, and connection maintenance or capacity charges. See "—Rate Structure" and "—Additional Revenue Components" below.
- (5) Includes \$10.8 million reimbursement from State Proposition 13 bond funds and \$28.2 million from the termination of the Las Posas water storage program.

Revenue Allocation Policy and Tax Revenues

The Board determines the water revenue requirement for each fiscal year after first projecting the *ad valorem* tax levy for that year. The tax levy for any year is subject to limits imposed by the Act and Board policy. Currently the tax levy is set to not exceed the amount needed to pay debt service on Metropolitan's general obligation bonds and a portion of Metropolitan's share of the debt service on the general obligation bonds issued by the State to finance the State Water Project. Any deficiency between tax levy receipts and Metropolitan's share of debt service obligations on general obligation bonded debt issued by the State is expected to be paid from Operating Revenues, as defined in the Master Resolution. See "HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES" in this Appendix A. The State Water Contract requires that in the event that Metropolitan fails or is unable to raise sufficient funds by other means, Metropolitan must levy upon all property within its boundaries not exempt from taxation a tax or assessment sufficient to provide for all payments under the State Water Contract.

Water Sales Revenues

Authority. Water rates are established by the Board and are not subject to regulation or approval by the Public Utilities Commission of California or by any other local, State or federal agency. In accordance with the Act, water rates must be uniform for like classes of service. Metropolitan has three classes of water service: (1) full service; (2) replenishment (~~formerly seasonal storage discontinued effective December 31, 2012~~); and (3) interim agricultural (~~discontinued effective December 31, 2012~~). See "—Classes of Water Service" below.

No member agency of Metropolitan is obligated to purchase water from Metropolitan. However, twenty-four of Metropolitan's 26 member agencies ~~have~~ entered into voluntary 10-year water supply

purchase orders for water purchases ~~through~~. These purchase orders expire on December 31, 2012. See “—Member Agency Purchase Orders” below. Consumer demand and locally supplied water vary from year to year, resulting in variability in water sales revenues. Metropolitan uses its financial reserves and budgetary tools to manage the financial impact of the variability in revenues due to fluctuations in annual water sales. See “MANAGEMENT’S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES” in this Appendix A.

Payment Procedure. Water is delivered to the member agencies on demand and is metered at the point of delivery. Member agencies are billed monthly and a late charge of one percent of the delinquent payment is assessed for delinquent payments not exceeding five business days. A late charge of two percent of the amount of the delinquent payment is charged for a payment that is delinquent for more than five business days for each month or portion of a month that the payment remains delinquent. Metropolitan has the authority to suspend service to any member agency delinquent for more than 30 days. Delinquencies have been rare; in such instances late charges have been collected. No service has been suspended because of delinquencies.

Water Sales. The following table sets forth the acre-feet of water sold and water sales receipts (including receipts from water wheeling and exchanges) for the five fiscal years ended June 30, 2012. The table provides cash basis information. Water sales revenues of Metropolitan for the two fiscal years ended June 30, 2011 and June 30, 2010, respectively, on an accrual basis, are shown in Appendix B - “THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR’S REPORT AND FINANCIAL STATEMENTS AS OF FISCAL YEARS ENDED JUNE 30, 2011 AND JUNE 30, 2010 AND BALANCE SHEETS AND STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS AS OF AND FOR THE NINE MONTHS ENDED MARCH 31, 2012 AND MARCH 31, 2011 (UNAUDITED)” attached to this ~~Official~~Offering Statement.

SUMMARY OF WATER SOLD AND WATER SALES RECEIPTS
Fiscal Years Ended June 30

Year	Acre-Feet⁽¹⁾ Sold	Gross Receipts⁽³⁴⁾ (in millions)	Average Receipts Per Acre Foot⁽⁴⁵⁾	Average Rate Per 1000 Gallons
2008	2,305,364	\$ 967.8	\$ 420	\$ 1.29
2009	2,166,936	988.1	456	1.40
2010	1,857,564	1,011.1	544	1.67
2011 ⁽²⁾	1,632,277	995.6	610	1.87
2012 ⁽³⁾	1,676,855	1,062.5	634	1.94

Source: Metropolitan.

(1) Year ended April 30.

(2) Includes the sale of 34,519 acre-feet and the receipt of \$25.7 million from the Calleguas Municipal Water District related to termination of the Las Posas water storage program.

(3) Includes 225,000 acre-feet of replenishment sales.

(4) ~~(3)~~ Gross receipts in each year are for sales in the twelve months ended April 30 of such year, with rates and charges invoiced in May and payable by the last business day of June of each year. Includes revenues from water wheeling and exchanges. See “METROPOLITAN REVENUES—Wheeling and Exchange Charges”.

- (5) ~~(4)~~ Gross receipts divided by acre-feet sold. An acre-foot is approximately 326,000 gallons. See table entitled "SUMMARY OF WATER RATES" in this Appendix A for a description of water rates and classes of service.

Rate Structure

The following rates and charges are elements of Metropolitan's rate structure for full service water deliveries:

Tier 1 and Tier 2 Water Supply Rates. The Tier 1 and Tier 2 Water Supply Rates are designed to recover Metropolitan's water supply costs. The Tier 2 Supply Rate is designed to reflect Metropolitan's costs of acquiring new supplies. Member agencies are charged the Tier 1 or Tier 2 Water Supply Rate for water purchases, as described under "—Member Agency Purchase Orders" below.

System Access Rate. The System Access Rate is intended to recover a portion of the costs associated with the conveyance and distribution system, including capital, operating and maintenance costs. All users (including member agencies and third-party entities wheeling or exchanging water; see "—Wheeling and Exchange Charges" below) of the Metropolitan system pay the System Access Rate.

Water Stewardship Rate. The Water Stewardship Rate is charged on a dollar per acre-foot basis to collect revenues to support Metropolitan's financial commitment to conservation, water recycling, groundwater recovery and other water management programs approved by the Board. The Water Stewardship Rate is charged for every acre-foot of water conveyed by Metropolitan because all users of Metropolitan's system benefit from the system capacity made available by investments in demand management programs.

System Power Rate. The System Power Rate is charged on a dollar per acre-foot basis to recover the cost of power necessary to pump water from the State Water Project and Colorado River through the conveyance and distribution system for Metropolitan's member agencies. The System Power Rate is charged for all Metropolitan supplies. Entities wheeling non-Metropolitan water supplies will pay the actual cost of power to convey water on the State Water Project, the Colorado River Aqueduct or the Metropolitan distribution system, whichever is applicable.

Treatment Surcharge. Metropolitan charges a treatment surcharge on a dollar per acre-foot basis for treated deliveries. The treatment surcharge is set to recover the cost of providing treated water service, including capital and operating cost.

Water Supply Surcharge. Effective January 1, 2009, Metropolitan adopted a Water Supply Surcharge of \$25 per acre-foot, applicable to Full Service Tier 1 untreated and treated water rates and to the Interim Agricultural Water Program untreated and treated water rates. The Water Supply Surcharge was intended to recover the costs of additional water transfers purchased to augment supplies from the State Water Project. These costs were anticipated to be about \$50 million in fiscal year 2008-09. However, on April 14, 2009 Metropolitan's Board adopted a Delta Supply Surcharge, which, effective September 1, 2009, eliminated and replaced the Water Supply Surcharge. See "—Delta Supply Surcharge" below.

Delta Supply Surcharge. On April 13, 2010, Metropolitan's Board adopted a Delta Supply Surcharge of \$51 and \$58 per acre-foot, effective January 1, 2011 and January 1, 2012, respectively, and applicable to all Tier 1, Interim Agricultural Water Program and Replenishment water rates. The Delta Supply Surcharge is designed to recover the additional supply costs Metropolitan faces as a result of pumping restrictions associated with the USFWS biological opinion on Delta smelt and other actions to protect endangered fish species. The Delta Surcharge was intended to remain in effect until a long-term solution for the Bay-Delta is achieved. Metropolitan anticipated that the Delta Supply Surcharge would be reduced or suspended as interim Delta improvements ease pumping restrictions, resulting in lower costs for additional supplies. On April 10, 2012, the Board suspended the Delta Supply Surcharge, effective July 1, 2012.

The amount of each of these rates since January 1, 2007, is shown in the table entitled "SUMMARY OF WATER RATES" under "—Water Rates by Water Category" below.

Litigation Challenging Rate Structure

SDCWA filed *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.* on June 11, 2010. The complaint alleges that the rates adopted by the Board on April 13, 2010, which became effective January 1, 2011, misallocate State Water Contract costs to the System Access Rate and the System Power Rate, and thus to charges for transportation of water, and that this results in an overcharge to SDCWA by at least \$24.5 million per year. The complaint alleges that all State Water Project costs should be allocated instead to Metropolitan's Supply Rate, even though under the State Water Contract Metropolitan is billed separately for transportation, power and supply costs. It states additionally that Metropolitan will overcharge SDCWA by another \$5.4 million per year by including the Water Stewardship Rate in transportation charges. Eight of Metropolitan's member agencies (the Cities of Glendale, Los Angeles and Torrance, Municipal Water District of Orange County and Foothill, Las Virgenes, Three Valleys and West Basin Municipal Water Districts) answered the complaint in support of Metropolitan. IID joined the litigation in support of SDCWA's challenge to Metropolitan's charges for transportation of water.

The complaint requested a court order invalidating the rates and charges adopted April 13, 2010, and that Metropolitan be mandated to allocate costs associated with State Water Project supplies and the Water Stewardship Rate to water supply charges and not to transportation charges. Rates in effect in prior years are not challenged in this lawsuit. Metropolitan contends that its rates are reasonable, equitably apportioned among its member agencies and lawful, and were adopted under a valid rate structure and cost of service approach developed in a multi-year collaborative process with its member agencies that has been in place since 2002. Nevertheless, to the extent that a court invalidates Metropolitan's adopted rates and charges, Metropolitan will be obligated to adopt rates and charges that comply with any mandates imposed by the court. Metropolitan expects that such rates and charges would still recover Metropolitan's cost of service. As such, revenues would not be affected. If Metropolitan's rates are revised in the manner proposed by SDCWA in the complaint, other member agencies ~~would~~ may pay higher rates unless other actions are taken by the Board.

Metropolitan held \$13 million in its financial reserves pursuant to the exchange contract between Metropolitan and SDCWA due to SDCWA's litigation challenging Metropolitan's rate structure as of June 30, 2011. This amount increased to \$50 million by the end of fiscal year 2011-12. See "—Financial Reserve Policy" below. Amounts held pursuant to the exchange agreement will continue to accumulate based on the quantities of exchange water that Metropolitan provides to SDCWA and the amount of charges disputed by SDCWA. These amounts are transferable to SDCWA if it prevails in the litigation.

SDCWA filed its First Amended Petition for Writ of Mandate and Complaint on October 27, 2011, adding five new claims to this litigation, two of which were eliminated from the case on January 4, 2012. The three remaining new claims are for breach of the water exchange agreement between Metropolitan and SDCWA (described herein under "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct—*Sale of Water by the Imperial Irrigation District to San Diego County Water Authority*") based on ~~improper~~ allegedly illegal calculation of rates; improper exclusion of SDCWA's payments under this exchange agreement from calculation of SDCWA's preferential rights to purchase Metropolitan supplies (see "—Preferential Rights" below); and illegality of "rate structure integrity" provisions in conservation and local resources incentive agreements between Metropolitan and SDCWA. Such "rate structure integrity" provisions permit the Board to terminate incentives payable under conservation and local resources incentive agreements between Metropolitan and a member agency due to certain actions by the member agency to challenge the rates that are the source of incentive payments. In June 2011, Metropolitan's Board authorized termination of two incentive agreements with SDCWA under the "rate structure integrity" provisions in such agreements after SDCWA filed its initial complaint challenging Metropolitan's rates.

SDCWA filed a Second Amended Petition for Writ of Mandate and Complaint on April 17, 2012, which contains additional allegations but no new causes of action. While believing that the three surviving claims added to the rate challenge lack merit, Metropolitan is unable to assess at this time the likelihood of success of these or any future claims or the potential impact on Metropolitan's revenues or operations.

On June 8, 2012, SDCWA filed a new lawsuit challenging the rates adopted by Metropolitan on April 10, 2012 to become effective January 1, 2013 and January 1, 2014. See "-Rate Structure" above and "-Water Rates by Water Category" below for a description of Metropolitan's water rate structure and the rates and charges adopted on April 10, 2012. The complaint contains allegations similar to those in the Second Amended Petition for Writ of Mandate and Complaint and new allegations asserting Metropolitan's rates violate Proposition 26. See "-California Ballot Initiatives" below for a description of Proposition 26. Metropolitan contends that its rates adopted on April 10, 2012 are reasonable, equitably apportioned among its member agencies and lawful and were adopted under a valid rate structure and cost of service approach. Metropolitan will defend this new litigation. Ten of Metropolitan's member agencies (the eight member agency parties to SDCWA's first lawsuit, Eastern Municipal Water District and Western Municipal Water District of Riverside County) answered the complaint in support of Metropolitan and IID joined the litigation in support of SDCWA. Metropolitan is unable to assess at this time the likelihood of success of this litigation or any future claims.

Member Agency Purchase Orders

The current rate structure provides for a member agency's agreement to purchase water from Metropolitan by means of a voluntary purchase order. In consideration of executing its purchase order, the member agency is entitled to purchase a greater amount of water at the lower Tier 1 Water Supply Rate, as described in the following paragraph. Under each purchase order, a member agency agrees to purchase, over the ten-year term of the contract, an amount of water equal to at least 60 percent of its highest firm demand for Metropolitan water in any fiscal year from 1989-90 through 2001-02 multiplied by ten. Member agencies are allowed to vary their purchases from year to year, but a member agency will be obligated to pay for the full amount committed under the purchase order, even if it does not take its full purchase order commitment by the end of the ten-year period. The existing purchase orders expire on December 31, 2012.

Each member agency that executed a purchase order will be allowed to purchase up to 90 percent of its base amount at the Tier 1 Water Supply Rate in any fiscal year during the term of the purchase order, and its base amount will be the greater of (1) its highest firm demand for Metropolitan water in any fiscal year from 1989-90 through 2001-02 or (2) its ten-year rolling average of firm demand for Metropolitan water. Amounts purchased by such agencies over the applicable base amount will be priced at the Tier 2 Water Supply Rate. Member agencies that did not enter into purchase orders will be permitted in any fiscal year to purchase 60 percent of their base amount (equal to the member agency's highest fiscal year demand between 1989-90 and 2001-02) at the Tier 1 Water Supply Rate. Twenty-four of Metropolitan's 26 member agencies executed purchase orders for an aggregate of 12.5 million acre-feet of water over the ten years ending December 31, 2012. As of May 31, 2011, 23 of the 24 member agencies with purchase orders had met their purchase order commitments. One agency, the City of Compton, was not on track to meet its commitment to purchase 33,720.6 acre-feet over the ten-year period. On November 8, 2011, Metropolitan's Board authorized the General Manager to execute a withdrawal of Compton's Purchase Order, effective January 1, 2003. This will lower Compton's Tier 1 limit as if its Purchase Order had not been executed and Compton will pay the Tier 2 Supply Rate on any future water purchases over the lower limit.

Metropolitan and its member agencies have begun discussing terms for potential renewals or replacements of purchase orders or alternative ways to determine the applicable Tier 1 and Tier 2 Water Supply Rate for purchases by member agencies after the existing purchase orders expire on December 31, 2012. Any renewals, replacements or Water Supply Rate ~~determination~~determinations would be subject to approval by Metropolitan's Board and the governing bodies of the respective member agencies.

Classes of Water Service

Full Service Water. Full service water service, formerly known as non-interruptible water service, includes water sold for domestic and municipal uses. Full service treated water rates are the sum of the applicable supply rate, system access rate, water stewardship rate, system power rate and treatment surcharge. Full service untreated water rates are the sum of the applicable supply rate, system access rate, water stewardship rate and system power rate. Full service water sales are the major component of Metropolitan water sales.

Interim Agricultural Water Program. This program provides a discounted rate for agricultural water users that, pursuant to the Act, are permitted to receive only surplus water not needed for domestic or municipal purposes. ~~Metropolitan delivered approximately 34,000 acre-feet of agricultural water under this program in fiscal year 2009-10.~~ The terms of the program provide that, should a water shortage occur, Metropolitan may reduce deliveries of agricultural water ~~under the program by 24 percent in 2010 and 18 percent in 2011~~ before imposing conservation measures on Full Service deliveries. ~~However, an allocation of Full Service deliveries in response to a water supply shortage could result in additional reductions of agricultural water deliveries. Metropolitan imposed a 30 percent reduction in agricultural water deliveries beginning January 1, 2008, to make this water (approximately 45,000 acre-feet) available to meet other demands.~~ Metropolitan delivered approximately 40,000 acre-feet of agricultural water under this program in fiscal year 2009-10, approximately 21,000 acre-feet in fiscal year 2010-11 and approximately 29,000 acre-feet in fiscal year 2011-12. On October 14, 2008, the Board approved annual reductions of the Interim Agricultural Water Program discount beginning January 1, 2010 and discontinuance of the program when the discount reaches zero on January 1, 2013. Customers participating in the program may irrevocably opt out of the program at the beginning of each calendar year during the phase-out period and may purchase water at Metropolitan's full service rates.

Replenishment. Under the Replenishment Service Program, water is sold at a discounted rate to member agencies that store surplus imported water when supplies are available and subsequently ~~use~~ produce the water to ~~offset demands on~~ reduce member agencies' deliveries from Metropolitan ~~in~~ during periods of high demand, emergencies or times of shortage. Replenishment Service Program deliveries are subject to availability. Metropolitan ceased deliveries under the Replenishment Service Program on May 1, 2007. On May 10, 2011, Metropolitan's Board authorized the sale of up to 225,000 acre-feet of ~~discounted~~ Replenishment Service Program deliveries to member agencies between May 10, 2011 and December 31, 2011. No Replenishment Service Program sales were included in Metropolitan's fiscal year 2012-13 and 2013-14 budgets and no Replenishment Service Program sales are included in financial projections for fiscal years 2014-15 through 2016-17. No Replenishment Rates were adopted for 2013 or 2014. See table entitled "SUMMARY OF WATER RATES" below.

In 2011, Metropolitan staff and the member agencies ~~are currently engaged in~~ began a process to review and refine the Replenishment Program. ~~Changes to the Replenishment Program are anticipated to be considered by Metropolitan's Board in 2012.~~ That process includes discussions of Purchase Order renewal or replacements. See "—Member Agency Purchase Orders" above. Metropolitan and its member agencies continue discussions of a potential incentive-based water storage program that would encourage storing water locally and ensure regional benefit. Ultimately, this new approach could replace the Replenishment Service Program.

~~Replenishment supplies sold at a discount in a given year may offset full service water sales. Metropolitan's water sales projections estimate the level of future production from groundwater, supported by an assumption of replenishment sales. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES—Water Sales Projections" in this Appendix A. To the extent that replenishment supplies are not available, estimated levels of future production from groundwater could be lower than estimated, resulting in a higher demand for Metropolitan supplies at full service water rates in the future.~~

Water Rates by Water Category

The following table sets forth Metropolitan's water rates by category beginning January 1, 2008. See also "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES—Water Sales Receipts" in this Appendix A. In addition to the base rates for untreated water sold in the different classes of service, the columns labeled "Treated" include the surcharge that Metropolitan charges for water treated at its water treatment plants. See "—Rate Structure" and "—Classes of Water Service" above for a description of current rates. [See "—Litigation Challenging Rate Structure" above for a description of litigation challenging Metropolitan's water rates.](#)

**SUMMARY OF WATER RATES
(Dollars per Acre-Foot)**

	<u>SUPPLY RATE</u>		<u>SYSTEM ACCESS RATE</u>	<u>WATER STEWARDSHIP RATE</u>	<u>SYSTEM POWER RATE</u>	<u>TREATMENT SURCHARGE</u>
	<u>Tier 1</u>	<u>Tier 2</u>				
January 1, 2008	\$ 73	\$171	\$143	\$25	\$110	\$157
January 1, 2009	\$134 † ⁽¹⁾	\$250	\$143	\$25	\$110	\$167
September 1, 2009	\$170 †† ⁽²⁾	\$250	\$154	\$41	\$119	\$217
January 1, 2010	\$170 †† ⁽²⁾	\$280	\$154	\$41	\$119	\$217
January 1, 2011	\$155 ††† ⁽³⁾	\$280	\$204	\$41	\$127	\$217
January 1, 2012	\$164 ††† ⁽³⁾	\$290	\$217	\$43	\$136	\$234
January 1, 2013*	\$140 †††† ⁽⁴⁾	\$290	\$223	\$41	\$189	\$254
January 1, 2014*	\$148 †††† ⁽⁴⁾	\$290	\$243	\$41	\$161	\$297

	<u>FULL SERVICE TREATED⁽⁴⁵⁾</u>		<u>FULL SERVICE UNTREATED⁽⁴⁶⁾</u>		<u>INTERIM AGRICULTURAL PROGRAM</u>		<u>REPLENISHMENT RATE</u>	
	<u>Tier 1</u>	<u>Tier 2</u>	<u>Tier 1</u>	<u>Tier 2</u>	<u>Treated</u>	<u>Untreated</u>	<u>Treated</u>	<u>Untreated</u>
January 1, 2008	\$508	\$606	\$351	\$449	\$394	\$261	\$390	\$258
January 1, 2009	\$579	\$695	\$412	\$528	\$465†	\$322†	\$436	\$294
September 1, 2009	\$701	\$781	\$484	\$564	\$587	\$394	\$558	\$366
January 1, 2010	\$701	\$811	\$484	\$594	\$615	\$416	\$558	\$366
January 1, 2011	\$744	\$869	\$527	\$652	\$687	\$482	\$601	\$409
January 1, 2012	\$794	\$920	\$560	\$686	\$765	\$537	\$651	\$442
January 1, 2013*	\$847	\$997	\$593	\$743	**	**	**	**
January 1, 2014*	\$890	\$1,032	\$593	\$735	**	**	**	**

Source: Metropolitan.

- * Rates effective January 1, 2013 and January 1, 2014 were adopted by Metropolitan's Board on April 10, 2012.
- ** The Interim Agricultural Water Program will be discontinued after 2012. Discussions on the ~~replenishment program~~ Replenishment Service Program and potential incentive-based water storage programs are continuing with Metropolitan's member agencies. No Replenishment Rates have been adopted for 2013 or 2014.
- ~~†~~⁽¹⁾ Includes \$25 per acre-foot Water Supply Surcharge.
- ~~††~~⁽²⁾ Includes \$69 per acre-foot Delta Supply Surcharge, which replaced Water Supply Surcharge.
- ~~†††~~⁽³⁾ Includes \$51 and \$58 per acre-~~feet~~^{foot} Delta Supply Surcharge for January 1, 2011 and January 1, 2012, respectively.
- ~~††††~~⁽⁴⁾ Excludes Delta Supply Surcharge, which will be suspended for 2013 and 2014.
- ~~(45)~~ Full service treated water rates are the sum of the applicable Supply Rate, System Access Rate, Water Stewardship Rate, System Power Rate and Treatment Surcharge.
- ~~(46)~~ Full service untreated water rates are the sum of the applicable Supply Rate, System Access Rate, Water Stewardship Rate and System Power Rate.

Additional Revenue Components

Additional charges for the availability of Metropolitan's water are:

Readiness-to-Serve Charge. This charge is designed to recover a portion of the principal and interest payments on water revenue bonds issued to fund capital improvements necessary to meet continuing reliability and water quality needs. The Readiness-to-Serve Charge ("RTS") is allocated to each member agency in proportion to the rolling ten-year share of deliveries through Metropolitan's system. The RTS

generated \$101.9 million in fiscal year 2009-10, \$119.2 million in fiscal year 2010-11 and \$133.9 million in fiscal year 2011-12.

Water Standby Charges. The Board is authorized to impose water standby or availability of service charges. In May 1993, the Board imposed a water standby charge for fiscal year 1993-94 ranging from \$6.94 to \$15 for each acre or parcel less than an acre within Metropolitan's service area, subject to specified exempt categories. Water standby charges have been imposed at the same rate in each year since 1993-94. Standby charges are assessments under the terms of Proposition 218, a State constitutional ballot initiative approved by the voters on November 5, 1996. See "—California Ballot Initiatives" below.

Member agencies have the option to utilize Metropolitan's existing standby charge authority as a means to collect all or a portion of their RTS charge. Standby charge collections are credited against the member agencies' RTS charges. See "—Readiness-to-Serve Charge" above. Twenty-two member agencies collect their RTS charges through standby charges. For fiscal years 2009-10, 2010-11 and 2011-12 RTS charges collected by means of such standby charges were \$42.8 million, \$43.2 million and \$42.9 million, respectively.

Capacity Charge. The Capacity Charge is a fixed charge levied on the maximum summer day demand placed on Metropolitan's system between May 1 and December 30 for the three-calendar-year period ended December 31, 2008 and December 31, 2009 for charges effective 2010 and 2011 respectively. The Capacity Charge is intended to recover the cost of providing peak capacity within the distribution system. Effective January 1, 2011, the Capacity Charge was \$7,200 per cfs of maximum daily flow, which increased to \$7,400 per cfs on January 1, 2012 and will decrease to \$6,400 per cfs and increase to \$8,600 per cfs, effective January 1, 2013 and January 1, 2014, respectively.

Financial Reserve Policy

Metropolitan's reserve policy currently provides for a minimum unrestricted reserve balance at June 30 of each year that is based on probability studies of the wet periods that affect Metropolitan's water sales. The policy establishes a minimum targeted unrestricted reserve level based on an 18-month revenue shortfall estimate and a maximum level based on an additional two years revenue shortfall estimate. The Water Rate Stabilization and Revenue Remainder funds increased by \$35.7 million in fiscal year 2008-09 and decreased by \$29 million in fiscal year 2009-10 and \$61 million during fiscal year 2010-11, which includes \$13 million held in financial reserves pursuant to the exchange contract between Metropolitan and SDCWA (see "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority") due to the SDCWA litigation challenging Metropolitan's rate structure. See "METROPOLITAN REVENUES—Litigation Challenging Rate Structure." Additional transfers related to the SDCWA litigation were made during fiscal year 2011-12, such that this reserve increased to \$50 million by the end of fiscal year 2011-12. As of June 30, 2012, the minimum reserve requirement was \$190 million. The maximum reserve limit at June 30, 2012 was \$458 million. Funds representing the minimum reserve level are held in the Revenue Remainder Fund, and any funds in excess of the minimum reserve level (up to the maximum reserve level) are held in the Water Rate Stabilization Fund. Reserves at June 30, 2012 totaled \$332 million, consisting of Water Rate Stabilization Fund, Revenue Remainder Fund and Water Stewardship Fund balances including the \$50 million held in Metropolitan's financial reserves pursuant to the exchange contract between Metropolitan and SDCWA due to SDCWA's litigation challenging Metropolitan's rate structure. See "METROPOLITAN REVENUES—Rate Structure", "—Litigation Challenging Rate Structure" and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES—Water Sales Receipts" in this Appendix A and "THE MASTER RESOLUTION—Water Revenue Fund—Revenue Remainder Fund" in Appendix C—SUMMARY OF CERTAIN PROVISIONS OF THE RESOLUTIONS. Unrestricted reserves in excess of the maximum reserve level may be used for any lawful purpose of Metropolitan, as directed by the Board. Consistent with State legislation, Metropolitan will ensure that any funds in excess of maximum reserve levels that are distributed to member agencies will be distributed in

proportion to water sales revenues received from each member agency. Since actual reserve balances were less than the maximum reserve limit at June 30, 2012, no action was taken by the Board. Unrestricted reserve balances include amounts held as collateral, from time to time, by Metropolitan's swap counterparties. In addition, Metropolitan maintains various restricted reserves, including reserves for risk retention, operations and maintenance expenses, State Water Contract payments, and other obligations and purposes.

Wheeling and Exchange Charges

The process for the delivery of water not owned or controlled by Metropolitan is referred to as "wheeling." Under the current rate structure, wheeling parties pay the System Access Rate and Water Stewardship Rate, Treatment Surcharge (if applicable) and power costs for wheeling transactions. See "—Rate Structure" above. These payments are included in Net Operating Revenues. Wheeling and exchange revenues totaled \$53.7 million during fiscal year 2009-10, \$51.8 million during fiscal year 2010-11, and \$89.6 million in fiscal year 2011-12. See "—Litigation Challenging Rate Structure" above for a description of litigation ~~filed~~ by the SDCWA and IID challenging Metropolitan's System Access Rate and Water Stewardship Rate.

Hydroelectric Power Recovery Revenues

Metropolitan has constructed 16 small hydroelectric plants on its distribution system. The plants are located in Los Angeles, Orange, Riverside and San Diego Counties at existing pressure control structures and other locations. The combined generating capacity of these plants is approximately 122 megawatts. The total capital cost of these 16 facilities is approximately \$176.1 million. Since 2000, annual energy generation sales revenues have ranged between \$16 million and \$27 million. Energy generation sales revenues were \$22.1 million for fiscal year 2010-11 and \$31.0 million in fiscal year 2011-12.

Power from five of the plants is sold to DWR under an existing contract at a price based on a contractual unit rate methodology to supply power to the State Water Project. This price is renegotiated every six years. For 2007 through 2012, the unit rate is determined by fixed and variable components. One variable component represents an incremental fuel price based on a five-year rolling average gas price.

Power from nine of the plants was sold to the Southern California Edison Company, a subsidiary of Edison International ("Edison") through October 31, 2008. Three new contracts effective November 1, 2008, split power sales from the nine plants among Edison, Los Angeles Department of Water and Power and the Southern California Public Power Authority. All three contracts are for the sale of renewable power and are based on a fixed energy rate for the term of the contracts. The minimum contract term is five years and maximum term is fifteen years.

Energy generation from a fifteenth plant, the Etiwanda Power Plant, is sold to the Pacific Gas and Electric Company ("PG&E") under a contract that was amended in November 2004 to accommodate terminating transmission and scheduling arrangements. The contract energy price is based on a formula that includes a monthly gas rate, a capital related cost and a performance factor. The contract is subject to renegotiation upon the occurrence of specified events and can be terminated by either party under various conditions and circumstances, beginning in 2014.

The sixteenth plant, the Diamond Valley Lake Hydroelectric Power Plant, began generating on May 23, 2001, and its current maximum dependable output is 21 megawatts. Actual generation is determined by water delivery requirements and is sold at market rates to various buyers.

Principal Customers

All of Metropolitan's regular customers are member agencies. Total water sales to the member agencies accrued for the fiscal year ended June 30, 2012 were 1.71 million acre-feet, generating \$1.10 billion

in water sales revenues for such period. Metropolitan's ten largest water customers in the year ended June 30, 2012 are shown in the following table, on an accrual basis. On June 11, 2010, the SDCWA filed litigation challenging Metropolitan's rates. See "—Litigation Challenging Rate Structure" above.

TEN LARGEST WATER CUSTOMERS
Year Ended June 30, 2012
Accrual Basis (Unaudited)

Agency	Water Sales Revenues	Percent of Total	Water Sales in Acre-Feet	Percent of Total
San Diego County Water Authority	\$ 231,573,403	21.1%	437,559	25.6%
MWD of Orange County	175,764,840	16.0	255,570	15.0
City of Los Angeles	129,679,515	11.8	209,746	12.3
West Basin MWD	87,113,090	8.0	113,366	6.6
Calleguas MWD	78,808,781	7.2	102,684	6.0
Eastern MWD	62,578,807	5.7	90,956	5.3
Western MWD	53,107,772	4.8	76,783	4.5
Three Valleys MWD	40,067,057	3.7	62,197	3.6
Inland Empire Utilities Agency	38,581,286	3.5	76,203	4.5
Central Basin MWD	34,798,440	3.2	51,484	3.0
Total	\$ 932,072,990	85.1%	1,476,547	86.5%
Total Water Sales Revenues	\$ 1,095,742,520	Total Acre-Feet	1,707,534	

Source: Metropolitan.

Preferential Rights

Section 135 of the Act gives each of Metropolitan's member agencies a preferential entitlement to purchase a portion of the water served by Metropolitan, based upon a ratio of all payments on tax assessments and otherwise, except purchases of water, made to Metropolitan by the member agency compared to total payments made by all member agencies on tax assessments and otherwise since Metropolitan was formed, except purchases of water. Historically, these rights have not been used in allocating Metropolitan's water. The California Court of Appeal has upheld Metropolitan's methodology for calculation of the respective member agencies' preferential rights under Section 135 of the Act. [SDCWA's litigation challenging Metropolitan's water rates also challenges Metropolitan's exclusion of payments for exchange water from the calculation of SDCWA's preferential right. See "—Litigation Challenging Rate Structure" above.](#)

California Ballot Initiatives

Proposition 218, a State ballot initiative known as the "Right to Vote on Taxes Act," was approved by the voters on November 5, 1996 adding Articles XIII C and XIII D to the California Constitution. Article XIII D provides substantive and procedural requirements on the imposition, extension or increase of any "fee" or "charge" levied by a local government upon a parcel of real property or upon a person as an incident of property ownership. As a wholesaler, Metropolitan serves water to its member agencies, not to persons or properties as an incident of property ownership. Thus, water rates charged by Metropolitan to its member agencies are not property related fees and charges and therefore are exempt from the requirements of Article XIII D. Fees for water service by Metropolitan's member agencies or their agencies providing retail water service are subject to the requirements of Article XIII D.

Article XIID also imposes certain procedures with respect to assessments. Under Article XIID, “standby charges” are considered “assessments” and must follow the procedures required for “assessments.” Metropolitan has imposed water standby charges since 1992. Any change to Metropolitan’s current standby charges could require notice to property owners and approval by a majority of such owners returning mail-in ballots approving or rejecting any imposition or increase of such standby charge. Twenty-two member agencies have elected to collect all or a portion of their readiness-to-serve charges through standby charges. See “—Additional Revenue Components—*Readiness-to-Serve Charge*” and “—*Water Standby Charges*” above. Even if Article XIID is construed to limit the ability of Metropolitan and its member agencies to impose or collect standby charges, the member agencies will continue to be obligated to pay the readiness-to-serve charges.

Article XIIC extends the people’s initiative power to reduce or repeal previously authorized local taxes, assessments fees and charges. This extension of the initiative power is not limited by the terms of Article XIIC to fees imposed after November 6, 1996 or to property-related fees and charges and absent other authority could result in retroactive reduction in existing taxes, assessments or fees and charges.

Proposition 26, a State ballot initiative aimed at restricting regulatory fees and charges, was approved by the California voters on November 2, 2010. Proposition 26 broadens the definition of “tax” in Article XIIC of the California Constitution to include levies, charges and exactions imposed by local governments, except for charges imposed for benefits or privileges or for services or products granted to the payor (and not provided to those not charged) that do not exceed their reasonable cost; regulatory fees that do not exceed the cost of regulation; fees for the use of local governmental property; fines and penalties imposed for violations of law; real property development fees; and assessments and property-related fees imposed under Article XIID of the California Constitution. California local taxes are subject to approval by two-thirds of the voters voting on the ballot measure for authorization. Proposition 26 applies to charges imposed or increased by local governments after the date of its approval. Metropolitan believes its water rates and charges are not taxes under Proposition 26. Nevertheless, Metropolitan is assessing whether Proposition 26 may affect future water rates and charges.

Propositions 218 and 26 were adopted as measures that qualified for the ballot pursuant to the State’s initiative process. From time to time, other initiative measures could be adopted or legislative measures could be approved by the Legislature, which may place limitations on the ability of Metropolitan or its member agencies to increase revenues or to increase appropriations. Such measures may further affect Metropolitan’s ability to collect taxes, assessments or fees and charges, which could have an effect on Metropolitan’s revenues.

Investment of Moneys in Funds and Accounts

All moneys in any of the funds and accounts established pursuant to Metropolitan’s water revenue or general obligation revenue bond resolutions are invested by the Treasurer in accordance with Metropolitan’s Statement of Investment Policy. All Metropolitan funds available for investment are currently invested in United States Treasury and agency securities, commercial paper, negotiable certificates of deposit, banker’s acceptances, corporate notes, municipal bonds, asset-backed, mortgage-backed securities and the California Local Agency Investment Fund (“LAIF”). The LAIF is a voluntary program created by statute as an investment alternative for California’s local governments and special districts. LAIF permits such local agencies to participate in an investment portfolio, which invests billions of dollars, using the investment expertise of the State Treasurer’s Office.

The Statement of Investment Policy provides that in managing Metropolitan’s investments, the primary objective shall be to safeguard the principal of the invested funds. The secondary objective shall be to meet all liquidity requirements and the third objective shall be to achieve a return on the invested funds. Although the Statement of Investment Policy permits investments in some asset-backed securities, the

portfolio does not include any of the special investment vehicles related to sub-prime mortgages. Revisions to the Statement of Investment Policy were adopted by Metropolitan's Board on June 7, 2011 which allow Metropolitan to exceed the portfolio and single issuer limits for purchases of California local agency securities when purchasing Metropolitan tendered bonds in conjunction with its self-liquidity program. See "METROPOLITAN EXPENDITURES—Variable Rate and Swap Obligations" in this Appendix A. Metropolitan's current investments comply with the Statement of Investment Policy.

As of July 31, 2012, the total market value of all Metropolitan funds was \$965.3 million and includes amounts held as collateral, from time to time, by Metropolitan's swap counterparties. See "METROPOLITAN EXPENDITURES—Variable Rate and Swap Obligations" in this Appendix A. In fiscal year 2011-12, Metropolitan's earnings on investments, including adjustments for gains and losses and premiums and discounts, on a cash basis (unaudited) were \$17.8 million. In fiscal year 2010-11, Metropolitan's earnings on investments, including adjustments for gains and losses and premiums and discounts, on a cash basis (unaudited) were \$20.0 million. ~~In fiscal year 2009-10, Metropolitan's earnings on investments, including adjustments for gains and losses and premiums and discounts,~~ on a cash basis (unaudited), including construction account and trust fund earnings, were \$29.520.0 million. In fiscal year ~~2008-09, 2009-10,~~ Metropolitan's earnings on investments, including adjustments for gains and losses and premiums and discounts, on a cash basis (unaudited) were \$36.429.5 million, including construction account and trust fund earnings. See Footnote 3 to Metropolitan's audited financial statements in Appendix B for additional information on the investment portfolio.

Metropolitan's regulations require that (1) the Treasurer provide an annual Statement of Investment Policy for approval by Metropolitan's Board, (2) the Treasurer provide a monthly investment report to the Board and the General Manager showing by fund the description, maturity date, yield, par, cost and current market value of each security, and (3) the General Counsel review as to eligibility the securities invested in by the Treasurer for that month and report his or her determinations to the Board. The Board approved the Statement of Investment Policy for fiscal year 2012-13 on June 12, 2012.

Subject to the provisions of Metropolitan's water revenue or general obligation bond resolutions, obligations purchased by the investment of bond proceeds in the various funds and accounts established pursuant to a bond resolution are deemed at all times to be a part of such funds and accounts and any income realized from investment of amounts on deposit in any fund or account therein will be credited to such fund or account. The Treasurer is required to sell or present for redemption any investments whenever it may be necessary to do so in order to provide moneys to meet required payments or transfers from such funds and accounts. For the purpose of determining at any given time the balance in any such funds, any such investments constituting a part of such funds and accounts will be valued at the then estimated or appraised market value of such investments.

All investments, including those authorized by law from time to time for investments by public agencies, contain certain risks. Such risks include, but are not limited to, a lower rate of return than expected and loss or delayed receipt of principal. The occurrence of these events with respect to amounts held under Metropolitan's water revenue or general obligation revenue bond resolutions, or other amounts held by Metropolitan, could have a material adverse effect on Metropolitan's finances. These risks may be mitigated, but are not eliminated, by limitations imposed on the portfolio management process by Metropolitan's Statement of Investment Policy.

The Statement of Investment Policy requires that investments have a minimum credit rating of A1/P1/F1 for short-term securities and A for longer-term securities at the time of purchase. If immediate liquidation of a security downgraded below these levels is not in the best interests of Metropolitan, the Treasurer or investment manager, in consultation with an ad hoc committee made up of the Chairman of the Board, the Chairman of the Finance and Insurance Committee and the General Manager, and with the concurrence of the General Counsel, may dispose of the security in an orderly and prudent manner

considering the circumstances, under terms and conditions approved by a majority of the members of such ad hoc committee. The Treasurer is required to include a description of any securities that have been downgraded below investment grade and the status of their disposition in the Treasurer's monthly report.

The Statement of Investment Policy also limits the amount of securities that can be purchased by category, as well as by issuer, and prohibits investments that can result in zero interest income. Metropolitan's securities are settled on a delivery versus payment basis and are held by an independent third-party custodian. See Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT AND FINANCIAL STATEMENTS AS OF FISCAL YEARS ENDED JUNE 30, 2011 AND JUNE 30, 2010 AND BALANCE SHEETS AND STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS AS OF AND FOR THE NINE MONTHS ENDED MARCH 31, 2012 AND MARCH 31, 2011 (UNAUDITED)" for a description of Metropolitan's investments at June 30, 2011.

Metropolitan retains two outside investment firms to manage the long-term portion of Metropolitan's portfolio. The outside managers are required to adhere to Metropolitan's Statement of Investment Policy. As of July 31, 2012, such managers are managing approximately \$325.4 million in investments on behalf of Metropolitan. Metropolitan's Statement of Investment Policy may be changed at any time by the Board (subject to State law provisions relating to authorized investments). There can be no assurance that the State law and/or the Statement of Investment Policy will not be amended in the future to allow for investments that are currently not permitted under State law or the Statement of Investment Policy, or that the objectives of Metropolitan with respect to investments or its investment holdings at any point in time will not change.

METROPOLITAN EXPENDITURES

General

The following table sets forth a summary of Metropolitan's expenditures, by major function, for the five years ended June 30, 2012. The table provides cash basis information, which is unaudited. Expenses of Metropolitan for the fiscal years ended June 30, 2011 and June 30, 2010, on an accrual basis, are shown in Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT AND FINANCIAL STATEMENTS AS OF FISCAL YEARS ENDED JUNE 30, 2011 AND JUNE 30, 2010 AND BALANCE SHEETS AND STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS AS OF AND FOR THE NINE MONTHS ENDED MARCH 31, 2012 AND MARCH 31, 2011 (UNAUDITED)."

SUMMARY OF EXPENDITURES

Fiscal Years Ended June 30 (Dollars in Millions)

	2008	2009	2010	2011	2012
Operation and Maintenance Costs ⁽¹⁾	\$ 416.9	\$ 455.6	\$ 441.6	\$ 430.8	\$ 425.3
Total State Water Project and Water Transfers ⁽²⁾	564.9	478.8	560.1	593.4	535.4
Total Debt Service	268.5	281.6	287.0	306.7	323.0
Construction Disbursements from Revenues ⁽³⁾	45.4	30.6	35.1	45.0	44.2
Other ⁽⁴⁾	6.4	8.3	5.3	2.4	2.8
Total Disbursements (net of reimbursements) ⁽⁵⁾	<u>\$1,302.1</u>	<u>\$1,254.9</u>	<u>\$1,329.1</u>	<u>\$1,378.3</u>	<u>\$1,334.3</u>

Source: Metropolitan.

- (1) Includes inventories, undistributed payroll, local resource programs, conservation programs and Colorado River Aqueduct (CRA) power. See the table headed "Summary of Receipts by Source" under "METROPOLITAN REVENUES" in this Appendix A.
- (2) Includes both operating and capital expense portions. See "METROPOLITAN'S WATER SUPPLY—Water Transfer, Storage and Exchange Programs" and "POWER SOURCES AND COSTS" in this Appendix A.
- (3) At the discretion of the Board, in any given year, Metropolitan may increase or decrease funding available for construction disbursements to be paid from revenues. Disbursements paid from revenues decreased in fiscal years 2007-08 and 2008-09, primarily due to the Board's policy to

maintain adequate reserve levels in the rate stabilization funds to mitigate future increases in water rates and charges. See "METROPOLITAN REVENUES—Financial Reserve Policy" in this Appendix A. Does not include expenditures of bond proceeds.

- (4) Includes operating equipment and arbitrage rebate.
- (5) Disbursements exceeded revenues in the fiscal years ended June 30, 2008, 2010 and 2011. See "METROPOLITAN REVENUES—Financial Reserve Policy" in this Appendix A.

Revenue Bond Indebtedness

Metropolitan has issued the following water revenue bonds, which as of August 1, 2012, were outstanding in the amounts set forth below:

<u>Name of Issue</u>	<u>Original Amount Issued</u>	<u>Principal Outstanding</u>
Water Revenue Bonds, Issue of 1991	\$ 300,000,000	\$ -0-
Water Revenue Bonds, Issue of 1992	550,000,000	-0-
Water Revenue Refunding Bonds, 1993 Series A	168,759,889	105,185,000
Water Revenue Refunding Bonds, 1993 Series B	89,595,000	-0-
Water Revenue Bonds, 1995 Series A	175,000,000	-0-
Water Revenue Refunding Bonds, 1996 Series A	108,375,000	-0-
Water Revenue Refunding Bonds, 1996 Series B	258,875,000	-0-
Water Revenue Bonds, 1996 Series C	377,500,000	-0-
Water Revenue Bonds, 1997 Authorization, Series A	650,000,000	-0-
Water Revenue Bonds, 1997 Authorization, Series B and Series C ⁽¹⁾	100,000,000	100,000,000
Water Revenue Refunding Bonds, 1998 Series A	148,705,000	-0-
Water Revenue Bonds, 1999 Authorization, Series A	100,000,000	-0-
Water Revenue Bonds, 1999 Authorization, Series B and Series C	100,000,000	-0-
Water Revenue Bonds, 2000 Series B1-B4 ⁽¹⁾	355,200,000	266,400,000
Water Revenue Refunding Bonds, 2001 Series A	195,670,000	-0-
Water Revenue Refunding Bonds, 2001 Series B1 and B-2	224,800,000	-0-
Water Revenue Bonds, 2001 Series C-1 and C-2	200,000,000	-0-
Water Revenue Refunding Bonds, 2002 Series A	96,640,000	-0-
Water Revenue Refunding Bonds, 2002 Series B	35,600,000	-0-
Water Revenue Refunding Bonds, 2003 Series A	36,215,000	25,910,000
Water Revenue Bonds, 2003 Authorization, Series B-1	105,580,000	-0-
Water Revenue Bonds, 2003 Authorization, Series B-2	94,420,000	-0-
Water Revenue Refunding Bonds, 2003 Series C-1, C-2 and C-3	338,230,000	-0-
Water Revenue Refunding Bonds, 2004 Series A-1 and A-2 ⁽¹⁾	162,455,000	94,530,000
Water Revenue Refunding Bonds, 2004 Series B	274,415,000	120,820,000
Water Revenue Bonds, 2003 Authorization, Series B-3 and B-4	300,000,000 262,2	92,430,000 54,725
	<u>95,000</u>	<u>,000</u>
<u>Water Revenue Bonds, 2003 Authorization, Series B-4</u>	<u>37,705,000</u>	<u>37,705,000</u>
Water Revenue Refunding Bonds, 2004 Series C	136,090,000	-0-
Water Revenue Bonds, 2005 Authorization, Series A	100,000,000	80,855,000
Water Revenue Bonds, 2005 Authorization, Series B-1 and B-2	100,000,000	-0-
Water Revenue Refunding Bonds, 2006 Series A-1 and A-2 ^{(1)*}	74,140,000	41,325,000
Water Revenue Bonds, 2005 Authorization, Series C	200,000,000	175,000,000
Water Revenue Bonds, 2005 Authorization, Series D-1 and D-2	100,000,000	-0-
Water Revenue Refunding Bonds, 2006 Series B	45,875,000	24,055,000
Water Revenue Bonds, 2006 Authorization, Series A	400,000,000	394,830,000
Water Revenue Bonds, 2006 Authorization, Series B	100,000,000	-0-
Water Revenue Refunding Bonds, 2007 Series A-1 and A-2	218,425,000	-0-
Water Revenue Refunding Bonds, 2007 Series B	81,900,000	-0-
Water Revenue Refunding Bonds, 2008 Series A-1 ⁽¹⁾	250,940,000	36,995,000
Water Revenue Refunding Bonds, 2008 Series A-2 ⁽¹⁾	250,635,000	150,385,000
Water Revenue Refunding Bonds, 2008 Series B	133,430,000	127,695,000
Water Revenue Refunding Bonds, 2008 Series C	79,045,000	55,110,000
Water Revenue Bonds, 2008 Authorization, Series A	200,000,000	196,025,000
Water Revenue Refunding Bonds, 2009 Series A-1 and A-2 ⁽¹⁾	208,365,000	208,365,000
Water Revenue Refunding Bonds, 2009 Series B	106,690,000	106,690,000
Water Revenue Refunding Bonds, 2009 Series C	91,165,000	91,165,000
Water Revenue Bonds, 2008 Authorization, Series B	21,615,000	19,465,000
Water Revenue Bonds, 2008 Authorization, Series C ⁽²⁾	78,385,000	78,385,000
Water Revenue Bonds, 2008 Authorization, Series D ⁽²⁾	250,000,000	250,000,000

<u>Name of Issue</u>	<u>Original Amount Issued</u>	<u>Principal Outstanding</u>
Water Revenue Refunding Bonds, 2009 Series D	81,065,000	75,825,000
Water Revenue Refunding Bonds, 2009 Series E	26,050,000	23,585,000
Water Revenue Refunding Bonds, Special Variable Rate, 2010 Series A ⁽¹⁾	128,005,000	100,685,000
Water Revenue Refunding Bonds, 2010 Series B	88,845,000	88,845,000
Water Revenue Bonds, 2010 Authorization, Series A ⁽²⁾	250,000,000	250,000,000
Water Revenue Refunding Bonds, 2011 Series A1-A4 ⁽¹⁾	228,875,000	228,875,000
Water Revenue Refunding Bonds, 2011 Series B	167,885,000	167,885,000
		<u>137,000</u>
		<u>15,000</u>
<i>(Continued on next page)</i>		
<i>(Continued from previous page)</i>		
Water Revenue Refunding Bonds, 2011 Series C	<u>\$ 157,100,000</u>	<u>\$ 157,100,000</u>
<i>(Footnotes on next page)</i>		
Water Revenue Refunding Bonds, 2012 Series A	181,180,000	181,180,000
Water Revenue Refunding Bonds, 2012 Series B-1 and B-2 ⁽¹⁾	98,585,000	98,585,000
Water Revenue Refunding Bonds, 2012 Series C	190,600,000	190,600,000
Water Revenue Refunding Bonds, 2012 Series D	39,520,000	39,520,000
Water Revenue Refunding Bonds, 2012 Series E1-E3	<u>89,460,000</u>	<u>89,460,000</u>
Total	\$10,499,904,889	\$4,533,765,000 <u>502,895,000</u>

Source: Metropolitan.

- (1) Outstanding variable rate obligation.
- (2) Designated as "Build America Bonds" pursuant to the American Recovery and Reinvestment Act of 2009.

* Metropolitan expects to issue its Water Revenue Refunding Bonds, 2012 Series F to refund these bonds. All or a portion of other series of Metropolitan fixed rate bonds may be refunded from the proceeds of the 2012 Series F Bonds.

Limitations on Additional Revenue Bonds

Resolution 8329, adopted by Metropolitan's Board on July 9, 1991, as amended and supplemented (collectively with all such supplemental resolutions, the "Revenue Bond Resolutions") provide for the issuance of Metropolitan's water revenue bonds. The Revenue Bond Resolutions establish limitations on the issuance of additional obligations payable from Net Operating Revenues. Under the Revenue Bond Resolutions, no additional bonds, notes or other evidences of indebtedness payable out of Operating Revenues may be issued having any priority in payment of principal, redemption premium, if any, or interest over any water revenue bonds or Parity Obligations. No additional Parity Bonds or Parity Obligations may be issued or incurred unless the conditions of the Revenue Bond Resolutions have been satisfied.

The laws governing Metropolitan's ability to issue water revenue bonds currently provide two additional limitations on indebtedness that may be incurred by Metropolitan. The Act provides for a limit on general obligation bonds, water revenue bonds and other evidences of indebtedness at 15 percent of the assessed value of all taxable property within Metropolitan's service area. As of August 1, 2012, outstanding general obligation bonds, water revenue bonds and other evidences of indebtedness in the amount of ~~\$4.744.71~~ billion represented approximately ~~0.230.22~~ percent of the fiscal year ~~2011-12~~ 2012-13 taxable assessed valuation of ~~\$2,067.52,097.4~~ billion. The second limitation under the Act specifies that no revenue bonds may be issued, except for the purpose of refunding, unless the amount of net assets of Metropolitan as shown on its balance sheet as of the end of the last fiscal year prior to the issuance of such bonds, equals at least 100 percent of the aggregate amount of revenue bonds outstanding following the issuance of such bonds. The net assets of Metropolitan at June 30, 2012 were \$6.44 billion. The aggregate amount of revenue bonds outstanding as of August 1, 2012 was ~~\$4.534.50~~ billion. The limitation does not apply to other forms of financing available to Metropolitan. Audited financial statements including the net assets of Metropolitan as of June 30, 2011 and June 30, 2010, respectively, are shown in Appendix B – "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT AND

FINANCIAL STATEMENTS AS OF FISCAL YEARS ENDED JUNE 30, 2011 AND JUNE 30, 2010 AND BALANCE SHEETS AND STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS AS OF AND FOR THE NINE MONTHS ENDED MARCH 31, 2012 AND MARCH 31, 2011 (UNAUDITED).” Metropolitan provides no assurance that the Act’s limitations on indebtedness will not be revised or removed by future legislation. Limitations under the Revenue Bond Resolutions respecting the issuance of additional obligations payable from Net Operating Revenues on a parity with water revenue bonds of Metropolitan will remain in effect so long as any water revenue bonds authorized pursuant to the Revenue Bond Resolutions are outstanding, provided however, that the Revenue Bond Resolutions are subject to amendment and supplement in accordance with their terms.

Variable Rate and Swap Obligations

As of August 1, 2012, Metropolitan had outstanding \$1.33 billion of variable rate obligations, including ~~\$535.8 million of~~ bonds bearing interest in the Index Mode (the “Index Tender Bonds”) and ~~\$100.7 million of~~ special variable rate bonds initially designated as self-liquidity bonds (the “Self-Liquidity Bonds”). ~~The~~

Metropolitan’s \$535.8 million of Index Tender Bonds bear interest at a rate that fluctuates weekly based on the SIFMA Municipal Swap Index published weekly by Municipal Market Data; however, if the purchase price of a series of Index Tender Bonds is not paid from proceeds of a remarketing or other funds following a scheduled mandatory tender, such Index Tender Bonds will bear interest at a default rate of up to twelve percent per annum until purchased by Metropolitan or redeemed. ~~The~~Metropolitan’s obligation to pay the purchase price of Index Tender Bonds is an unsecured, special limited obligation of Metropolitan payable from Net Operating Revenues. Metropolitan has not secured any liquidity facility or letter of credit to pay the purchase price of any tendered Index Tender Bonds.

Metropolitan’s \$100.7 million of Self-Liquidity Bonds are variable rate demand bonds that bear interest at a weekly rate determined by the remarketing agent for the Self-Liquidity Bonds. The Self-Liquidity Bonds are subject to optional tender upon seven days’ notice by the owners thereof and mandatory tender upon specified events. Metropolitan is irrevocably committed to purchase all Self-Liquidity Bonds tendered pursuant to any optional or mandatory tender to the extent that remarketing proceeds are insufficient therefor. Metropolitan’s obligation to pay the purchase price of any tendered Self-Liquidity Bonds is an unsecured, special limited obligation of Metropolitan payable from Net Operating Revenues and other available funds. Metropolitan has not secured any liquidity facility or letter of credit to pay the purchase price of any tendered Self-Liquidity Bonds. ~~See “Other Revenue Obligations” below.~~

The interest rates for Metropolitan’s other variable rate demand obligations, totaling \$689.6 million, are reset on a daily or weekly basis. Such variable rate demand obligations are supported by Standby Bond Purchase Agreements between Metropolitan and various liquidity providers. ~~As of August 1, 2012, the that provide for purchase of variable rate bonds by the applicable liquidity provider upon tender of such variable rate bonds and a failed remarketing. A decline in the creditworthiness of a liquidity provider will likely result in an increase in the interest rate of the applicable variable rate bonds, as well as an increase in the risk of a failed remarketing of such tendered variable rate bonds. Variable rate bonds purchased by a liquidity provider bear interest at a significantly higher interest rate and Metropolitan’s obligation to reimburse the liquidity provider may convert the term of the variable rate bonds purchased by the liquidity provider into a term loan amortizable over a period of up to three years, depending on the applicable liquidity facility.~~

The following table sets forth a listing of the liquidity providers, the expiration date of each facility and the principal amount of outstanding bonds covered under each facility. ~~as of August 1, 2012.~~

Liquidity Provider	Bond Issue	Principal Outstanding	Facility Expiration
Barclays Bank PLC	2008 Series A-2	\$150,385,000	September 2013
	Total	\$150,385,000	
Bank of America, N.A.	2008 Series A-1	\$36,995,000	September 2014
	Total	\$36,995,000	
JP Morgan Chase Bank ⁽¹⁾	2004 Series A-1	\$ 47,265,000	September 2012
	2004 Series A-2	47,265,000	September 2012
	Total	\$94,530,000	
Wells Fargo Bank, N.A.	2000 Series B-3	\$ 88,800,000	February 2014
	2000 Series B-4	88,800,000	February 2014
	Total	\$177,600,000	
Banco Bilbao Vizcaya Argentaria, S.A. (BBVA)	2000 Series B-2	\$ 88,800,000	July 2013
	2006 Series A-1*	20,660,000	May 2013
	2006 Series A-2*	20,665,000	May 2013
	Total	\$130,125,000	
Landesbank Hessen-Thüringen Girozentrale (Helaba)	1997 Series B	\$ 50,000,000	December 2015 ⁽²⁾
	1997 Series C	50,000,000	December 2015 ⁽²⁾
	Total	\$100,000,000	
Total		\$689,635,000	

Source: Metropolitan.

(1) Metropolitan intends to replace this facility prior to its September 2012 expiration.

(2) Subject to earlier termination on December 31, 2012.

* [Metropolitan expects to issue its Water Revenue Refunding Bonds, 2012 Series F to refund these bonds. All or a portion of other series of Metropolitan fixed rate bonds may be refunded from the proceeds of the 2012 Series F Bonds.](#)

Included in Metropolitan's \$1.33 billion of variable rate obligations are \$807.8 million of variable rate demand obligations which, by virtue of interest rate swap agreements, are treated by Metropolitan as fixed rate debt for the purpose of calculating debt service requirements, although the variable payments that Metropolitan receives from swap counterparties do not usually equal the payments that Metropolitan makes on associated variable rate debt. The remaining \$518 million of variable rate obligations represent approximately 11 percent of total outstanding water revenue bonds.

Metropolitan's variable rate exposure policy requires that variable rate debt be managed to limit net interest cost increases within a fiscal year as a result of interest rate changes to no more than \$5 million. In addition, the maximum amount of variable interest rate exposure (excluding variable rate bonds associated with interest rate swap agreements) is limited to 40 percent of total outstanding water revenue bond debt. Variable rate debt capacity will be reevaluated as interest rates change and managed within these parameters.

By resolution adopted on September 11, 2001, Metropolitan's Board authorized the execution of interest rate swap transactions and related agreements in accordance with a master swap policy, which was subsequently amended by resolutions adopted on July 14, 2009 and May 11, 2010. Metropolitan may execute interest rate swaps if the transaction can be expected to reduce exposure to changes in interest rates

on a particular financial transaction or in the management of interest rate risk derived from Metropolitan's overall asset/liability balance, result in a lower net cost of borrowing or achieve a higher net rate of return on investments made in connection with or incidental to the issuance, incurring or carrying of Metropolitan's obligations or investments, or manage variable interest rate exposure consistent with prudent debt practices and Board-approved guidelines. The Chief Financial Officer reports to the Finance and Insurance Committee of Metropolitan's Board each month on outstanding swap transactions, including notional amounts outstanding, counterparty exposures and termination values based on then-existing market conditions.

Metropolitan currently has two types of interest rate swaps. Under the first type, Metropolitan receives payments that are calculated by reference to a floating interest rate and makes payments that are calculated by reference to a fixed interest rate. These swaps are referred to in the table below as "Fixed Payor Swaps." Under the second type, referred to in the table below as "Basis Swaps," Metropolitan receives payments calculated by reference to a percentage of the taxable index, LIBOR. In return, Metropolitan makes payments that are calculated based on either SIFMA or the taxable short-term index, one-month LIBOR.

Net payments under the terms of the interest rate swap agreements are payable on a parity with the Parity Obligations. Termination payments under the 2002 A and 2002 B interest rate swap agreements would be payable on a parity with the Parity Obligations. All other termination payments related to interest rate swap agreements would be subordinate to the Parity Obligations.

The following swap transactions were outstanding as of August 1, 2012:

FIXED PAYOR SWAPS:

Designation	Notional Amount Outstanding	Swap Counterparty	Fixed Payor Rate	MWD Receives	Maturity Date
2002 A	88,694,700	Morgan Stanley Capital Services, Inc.	3.300	57.74% of one-month LIBOR	7/1/2025
2002 B	33,180,300	JPMorgan Chase Bank	3.300	57.74% of one-month LIBOR	7/1/2025
2003 ⁽¹⁾	163,987,500	Deutsche Bank AG	3.257	61.20% of one-month LIBOR	7/1/2030
2003	163,987,500	JPMorgan Chase Bank	3.257	61.20% of one-month LIBOR	7/1/2030
2004 A	94,530,000	Morgan Stanley Capital Services, Inc.	2.917	61.20% of one-month LIB OR LIBOR	7/1/2023
2004 C	57,733,500	Morgan Stanley Capital Services, Inc.	2.980	61.55% of one-month LIBOR	10/1/2029
2004 C	47,236,500	Citigroup Financial Products, Inc.	2.980	61.55% of one-month LIBOR	10/1/2029
2005	58,547,500	JPMorgan Chase Bank	3.360	70% of 3-month LIBOR	7/1/2030
2005	58,547,500	Citigroup Financial Products, Inc.	3.360	70% of 3-month LIBOR	7/1/2030
2006 ⁽¹⁾	20,697,000 <u>20,697,500</u>	Deutsche Bank AG	3.210	63% of 3-month LIBOR	7/1/2021
2006	<u>20,697,500</u>	JPMorgan Chase Bank	3.210	63% of 3-month LIBOR	7/1/2021
Total	\$807,840,000				

Source: Metropolitan.

(1) The obligations under these interest rate swap agreements were assigned by UBS AG to Deutsche Bank AG, New York Branch, pursuant to novation transactions dated July 22, 2010.

BASIS SWAPS:

Swap	Notional Amount Outstanding	Swap Counterparty	Met Receives	Met Pays	Maturity Date
2004	\$125,000,000	JPMorgan Chase Bank	70% of one-month LIBOR + 31.5 bp	SIFMA	7/1/2014
2004	<u>125,000,000</u>	JPMorgan Chase Bank	70% of one-month LIBOR + 31.5 bp	SIFMA	7/1/2014
Total	\$250,000,000				

Source: Metropolitan.

These interest rate swap agreements entail risk to Metropolitan. The counterparty may fail or be unable to perform, interest rates may vary from assumptions, Metropolitan may be required to post collateral

in favor of its counterparties and Metropolitan may be required to make significant payments in the event of an early termination of an interest rate swap. Metropolitan believes that if such an event were to occur, it would not have a material adverse impact on its financial position. Metropolitan seeks to manage counterparty risk by diversifying its swap counterparties, limiting exposure to any one counterparty, requiring collateralization or other credit enhancement to secure swap payment obligations, and by requiring minimum credit rating levels. Initially swap counterparties must be rated at least "Aa3" or "AA-", or equivalent by any two of the nationally recognized credit rating agencies; or use a "AAA" subsidiary as rated by at least one nationally recognized credit rating agency. Should the credit rating of an existing swap counterparty drop below the required levels, Metropolitan may enter into additional swaps if those swaps are "offsetting" and risk-reducing swaps. Each counterparty is initially required to have minimum capitalization of at least \$150 million. See Note 5(f) in Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT AND FINANCIAL STATEMENTS AS OF FISCAL YEARS ENDED JUNE 30, 2011 AND JUNE 30, 2010 AND BALANCE SHEETS AND STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS AS OF AND FOR THE NINE MONTHS ENDED MARCH 31, 2012 AND MARCH 31, 2011 (UNAUDITED)."

Early termination of an interest rate swap agreement could occur due to a default by either party or the occurrence of a termination event. As of July 31, 2012, Metropolitan would have been required to pay to its counterparties termination payments if some of its swaps were terminated on that date and would have been entitled to receive from its counterparties termination payments if other swaps were terminated on that date. Metropolitan estimated its net exposure to its counterparties for all such termination payments at July 31, 2012, to be approximately \$176 million. Metropolitan does not presently anticipate early termination of any of its interest rate swap agreements due to default by either party or the occurrence of a termination event. However, effective June 28, 2012, Metropolitan exercised optional early termination provisions to terminate all or a portion of certain interest rate swap agreements totaling a notional amount of \$322 million.

Metropolitan is required to post collateral in favor of a counterparty to the extent that Metropolitan's total exposure for termination payments to that counterparty exceeds the threshold specified in the applicable swap agreement. Conversely, the counterparties are required to release collateral to Metropolitan or post collateral for the benefit of Metropolitan as market conditions become favorable to Metropolitan. As of July 31, 2012, Metropolitan had a total of \$29.2 million of collateral posted with three counterparties. The amount of required collateral varies from time to time due primarily to interest rate movements and can change significantly over a short period of time. See "METROPOLITAN REVENUES—Financial Reserve Policy." In the future, Metropolitan may be required to post additional collateral, or may be entitled to a reduction or return of the required collateral amount. Collateral deposited by Metropolitan is held by the counterparties; a bankruptcy of any counterparty holding collateral posted by Metropolitan could adversely affect the return of the collateral to Metropolitan. Moreover, posting collateral limits Metropolitan's liquidity. If collateral requirements increase significantly, Metropolitan's liquidity may be materially adversely affected.

Other Revenue Obligations

Metropolitan's ~~\$535.8 million of Index Tender Bonds, outstanding as of August 1, 2012, are subject to mandatory tender under certain circumstances. Metropolitan anticipates that it will pay the purchase price of tendered Index Tender Bonds~~ 89.5 million of Parity Bonds bearing interest in a term mode (the "Term Mode Bonds") bear interest at a fixed rate for a specified period for each series of up to four years, after which the Term Mode Bonds must be tendered for purchase and a new interest mode shall be determined for such series; however, if the purchase price of a series of Term Mode Bonds is not paid from proceeds of a remarketing such Index Tender Bonds or from other available funds.— following a scheduled mandatory tender, such Term Mode Bonds will bear interest at a default rate of up to twelve percent per annum until purchased by Metropolitan or redeemed. Metropolitan's obligation to pay the purchase price of such ~~Index Tender~~ Term Mode Bonds is an unsecured obligation of Metropolitan ~~that it would pay from Net Operating~~

~~Revenues only after it has made payments and deposits with respect to its Operating Revenues, the Parity Bonds and Parity Obligations and other obligations secured by~~ payable from Net Operating Revenues. Metropolitan has not secured any liquidity facility or letter of credit to ~~support the payment of the purchase price of tendered Index Tender Bonds of any series. If the purchase price of the Index Tender Bonds of any series is not paid, such Index Tender Bonds will be subject to special mandatory redemption, in part, 18, 36 and 54 months following the purchase default. Any such special mandatory redemption payment will constitute a Bond Obligation payable on a parity with the Parity Bonds and Parity Obligations.~~ pay the purchase price of Term Mode Bonds in connection with any scheduled mandatory tender.

~~Metropolitan's \$100.7 million of Self-Liquidity Bonds, outstanding as of August 1, 2012, are subject to mandatory tender under certain circumstances and, while interest thereon is reset on a weekly basis, to optional tender. Metropolitan is irrevocably committed to purchase all tendered Self-Liquidity Bonds to the extent that remarketing proceeds are insufficient therefor and no standby bond purchase agreement or other liquidity facility with a liquidity provider is in effect. Metropolitan's obligation to purchase tendered Self-Liquidity Bonds is an unsecured, special limited obligation of Metropolitan payable from Net Operating Revenues. In addition, Metropolitan's investment policy permits it to purchase tendered Self-Liquidity Bonds as an investment of its investment portfolio (other than amounts in its investment portfolio consisting of bond reserve funds). Thus, while Metropolitan is only obligated to purchase tendered Self-Liquidity Bonds from Net Operating Revenues, Metropolitan may use the cash and investments in its investment portfolio (other than amounts in its investment portfolio consisting of bond reserve funds) to purchase tendered Self-Liquidity Bonds. See "METROPOLITAN REVENUES—Investment of Moneys in Funds and Accounts" in this Appendix A.~~

Subordinate Revenue Obligations

Metropolitan currently is authorized to issue subordinate debt of up to \$400,000,000 of Commercial Paper Notes payable from Net Operating Revenues on a basis subordinate to the Parity Bonds and the Parity Obligations. Although no Commercial Paper Notes are currently outstanding, the authorization remains in full force and effect and Metropolitan may issue Commercial Paper Notes from time to time. In addition, Metropolitan obtained a \$20 million California Safe Drinking Water Revolving Fund Loan in 2003 at an interest rate of 2.39 percent per annum to reimburse construction costs for oxidation retrofit facilities at the Henry J. Mills Treatment Plant in Riverside County. The loan will be repaid over 20 years, with semiannual payments of \$632,000 through January 1, 2024. The loan payment obligation is subordinate to the Parity Bonds and Parity Obligations. As of August 1, 2012, the principal balance outstanding was \$13.1 million.

General Obligation Bonds

As of August 1, 2012, \$196,545,000 aggregate principal amount of general obligation bonds payable from ad valorem property taxes were outstanding. *Ad valorem* taxes levied by Metropolitan must be applied solely to the payment of general obligation bonds and other voter-approved indebtedness. Metropolitan's revenue bonds are not payable from the levy of *ad valorem* property taxes.

<u>General Obligation Bonds</u>	<u>Amount Issued</u> ⁽¹⁾	<u>Principal Outstanding</u>
Waterworks General Obligation Refunding Bonds, 2004 Series A	\$ 68,345,000	\$ 49,910,000
Waterworks General Obligation Refunding Bonds, 2005 Series A	64,705,000	63,640,000
Waterworks General Obligation Refunding Bonds, 2009 Series A	45,515,000	43,510,000
Waterworks General Obligation Refunding Bonds, 2010 Series A	<u>39,485,000</u>	<u>39,485,000</u>
Total	<u>\$397,100,000</u> <u>218,050,000</u>	<u>\$196,545,000</u>

Source: Metropolitan.

- (1) Voters authorized Metropolitan to issue \$850,000,000 of Waterworks General Obligation Bonds, Election 1966, in multiple series, in a special election held on June 7, 1966. This authorization has been fully utilized. This table lists bonds that refunded such Waterworks General Obligation Bonds, Election 1966.

State Water Contract Obligations

General. On November 4, 1960, Metropolitan entered into its State Water Contract with DWR, under which Metropolitan receives an entitlement to water service from the State Water Project. Subsequently, other public agencies also entered into water supply contracts with DWR, all of which were patterned after Metropolitan's State Water Contract. Metropolitan's State Water Contract accounts for nearly one-half of the total entitlement for State Water Project water contracted for by all contractors.

The State Water Contract will remain in effect until 2035 or until all DWR bonds issued to finance construction of project facilities are repaid, whichever is longer. At the expiration of the State Water Contract, Metropolitan has the option to continue service under substantially the same terms and conditions. Metropolitan presently intends to exercise this option to continue service to at least 2052. As of August 1, 2012, the latest maturity of outstanding DWR bonds issued for such purpose was December 1, 2035.

Under the State Water Contract, Metropolitan is obligated to pay allocable portions of the cost of construction of the system and ongoing operating and maintenance costs through at least 2035, regardless of quantities of water available from the project. Other payments are based on deliveries requested and actual deliveries received, costs of power required for actual deliveries of water, and offsets for credits received. Metropolitan's payment obligation for the State Water Project for the fiscal year ended June 30, 2012 was \$479.8 million, which amount reflects prior year's credits of \$59.0 million. For the fiscal year ended June 30, 2012, Metropolitan's payment obligations under the State Water Contract were approximately 40 percent of Metropolitan's total annual expenditures. A portion of Metropolitan's annual property tax levy is for payment of State Water Contract capital charges. See Note 9(a) to Metropolitan's audited financial statements in Appendix B for an estimate of Metropolitan's payment obligations under the State Water Contract. Also see "POWER SOURCES AND COSTS" in this Appendix A for a description of current and future costs for electric power required to operate State Water Project pumping systems and a description of litigation involving the federal relicensing of the Hyatt-Thermalito hydroelectric generating facilities at Lake Oroville.

On April 25, 2005, a group of fourteen State Water Project contractors filed suit against DWR challenging the manner in which it allocates certain energy costs and revenues related to operation of the State Water Project. Among other things, these contractors alleged that DWR has been and is administering certain provisions of State Water Contract incorrectly, depriving them of "all benefits" derived from the sale or other disposal of electrical energy generated at the Hyatt-Thermalito power facility. The plaintiffs did not allege specific amounts for damages; however, success by plaintiffs could have resulted in shifting tens of millions of dollars in annual costs from State Water Project contractors located north of the Tehachapi Mountains to State Water Project contractors located south of the Tehachapi Mountains and on the Central Coast, including Metropolitan. Metropolitan and twelve other State Water Project contractors intervened in the litigation. After a trial limited to contract interpretation issues, on September 14, 2009, the court rejected all of the plaintiffs' assertions and on April 19, 2010, the court dismissed all remaining claims without leave to amend. The court entered its final statement of decision and final judgment in favor of defendants on May 3, 2010. On May 25, 2010, the plaintiffs filed a motion for a new trial, which was denied. The plaintiffs filed a notice of appeal on July 1, 2010. No date for oral argument has been set by the court.

The State Water Contract requires that in the event that Metropolitan fails or is unable to raise sufficient funds by other means, Metropolitan must levy upon all property within its boundaries not exempt from taxation a tax or assessment sufficient to provide for all payments under the State Water Contract.

Currently a portion of the capital costs under the State Water Contract are paid from ad valorem taxes levied by Metropolitan. In the opinion of Metropolitan's General Counsel, a tax increase to provide for additional payments under the State Water Contract would be within the exemption permitted under Article XIII A of the State Constitution as a tax to pay pre-1978 voter approved indebtedness.

Metropolitan capitalizes its share of system construction costs as participation rights in State Water Project facilities as such costs are billed by DWR. Unamortized participation rights essentially represent a prepayment for future water deliveries through the State Water Project system. Metropolitan's share of system operating and maintenance costs are annually expensed.

Metropolitan has entered into amendments to the State Water Contract that represent additional long-term obligations, as described below.

Devil Canyon-Castaic Contract. On June 23, 1972, Metropolitan and five other southern California public agencies entered into a contract (the "Devil Canyon-Castaic Contract") with DWR for the financing and construction of the Devil Canyon and Castaic power recovery facilities, located on the aqueduct system of the State Water Project. Under this contract, DWR agreed to build the Devil Canyon and Castaic facilities, using the proceeds of revenue bonds issued by DWR under the State Central Valley Project Act. DWR also agreed to use and apply the power made available by the construction and operation of such facilities to deliver water to Metropolitan and the other contracting agencies. Metropolitan, in turn, agreed to pay to DWR 88.1 percent of the debt service on the revenue bonds issued by DWR. For calendar year 2011, this represents a payment of \$7.6 million. In addition, Metropolitan agreed to pay 78.5 percent of the operation and maintenance expenses of the Devil Canyon facilities and 96 percent of the operation and maintenance expenses of the Castaic facilities. Metropolitan's obligations under the Devil Canyon-Castaic Contract continue until the bonds are fully retired in 2022 even if DWR is unable to operate the facilities or deliver power from these facilities.

Off-Aqueduct Power Facilities. In addition to system "on-aqueduct" power facilities costs, DWR has, either on its own or by joint venture, financed certain off-aqueduct power facilities. The power generated is utilized by the system for water transportation and other State Water Project purposes. Power generated in excess of system needs is marketed to various utilities and the California power exchange market. Metropolitan is entitled to a proportionate share of the revenues resulting from sales of excess power. By virtue of a 1982 amendment to the State Water Contract and the other water supply contracts, Metropolitan and the other water contractors are responsible for paying the capital and operating costs of the off-aqueduct power facilities regardless of the amount of power generated. Other costs of Metropolitan in relation to the State Water Project and the State Water Contract may increase as a result of restructuring of California's electric utility industry and new Federal Energy Regulatory Commission regulations.

East Branch Enlargement Amendment. In 1986, Metropolitan's State Water Contract and the water supply contracts of certain other State Water Project contractors were amended for the purpose, among others, of financing the enlargement of the East Branch of the California Aqueduct. Under the amendment, enlargement of the East Branch can be initiated either at Metropolitan's request or by DWR finding that enlargement is needed to meet demands. Metropolitan, the other State Water Contractors on the East Branch, and DWR are currently in discussions on the timetable and plan for future East Branch enlargement actions.

The amendment establishes a separate subcategory of the Transportation Charge under the State Water Contract for the East Branch Enlargement and provides for the payment of costs associated with financing and operating the East Branch Enlargement. Under the amendment, the annual financing costs for such facilities financed by bonds issued by DWR are allocated among the participating contractors based upon the delivery capacity increase allocable to each participating contractor. Such costs include, but are not limited to, debt service, including coverage requirements, deposits to reserves, and certain operation and maintenance expenses, less any credits, interest earnings or other moneys received by DWR in connection with this facility.

If any participating contractor defaults on payment of its allocable charges under the amendment, among other things, the non-defaulting participating contractors may assume responsibility for such charges and receive delivery capability that would otherwise be available to the defaulting participating contractor in proportion to the non-defaulting contractor's participation in the East Branch Enlargement. If participating contractors fail to cure the default, Metropolitan will, in exchange for the delivery capability that would otherwise be available to the defaulting participating contractor, assume responsibility for the capital charges of the defaulting participating contractor.

Water System Revenue Bond Amendment. In 1987, the State Water Contract and other water supply contracts were amended for the purpose of financing State Water Project facilities through revenue bonds. This amendment establishes a separate subcategory of the Delta Water Charge and the Transportation Charge for projects financed with DWR water system revenue bonds. This subcategory of charge provides the revenues required to pay the annual financing costs of the bonds and consists of two elements. The first element is an annual charge for repayment of capital costs of certain revenue bond financed water system facilities under the existing water supply contract procedures. The second element is a water system revenue bond surcharge to pay the difference between the total annual charges under the first element and the annual financing costs, including coverage and reserves, of DWR's water system revenue bonds.

If any contractor defaults on payment of its allocable charges under this amendment, DWR is required to allocate a portion of the default to each of the nondefaulting contractors, subject to certain limitations, including a provision that no nondefaulting contractor may be charged more than 125 percent of the amount of its annual payment in the absence of any such default. Under certain circumstances, the nondefaulting contractors would be entitled to receive an allocation of the water supply of the defaulting contractor.

The following table sets forth Metropolitan's projected costs of State Water Project water, based upon DWR's Annual Billing to Metropolitan for calendar year 2012 and projections based on Metropolitan's adopted biennial budget for fiscal years 2012-13 and 2013-14. The projections include projected costs to complete the planning phase of the BDCP. If a Bay-Delta improvement alternative is identified and funding is approved, construction may commence in 2016. See "METROPOLITAN'S WATER SUPPLY—State Water Project—*Bay-Delta Regulatory and Planning Activities.*"

**PROJECTED COSTS OF METROPOLITAN
FOR STATE WATER PROJECT WATER⁽¹⁾
(Dollars in Millions)**

Year Ending June 30	Capital Costs	Minimum OMP&R ⁽²⁾	Power Costs ⁽³⁾	Refunds & Credits	Total ⁽⁴⁾	— — —
2013	\$179.6	\$179.5	\$279.6	\$(45.2)	\$593.4	—
2014	185.3	184.6	238.1	(44.1)	563.8	—
2015	202.8	186.1	242.6	(35.3)	596.1	—
2016	216.5	189.6	234.9	(35.3)	605.5	—
2017	222.3	191.1	247.3	(35.3)	625.3	—

(1)

Projections are based upon DWR's Annual Billing to Metropolitan for 2012 and attachments, (dated July 1, 2011, 2011) and Metropolitan ~~water purchase estimates's adopted biennial budget for fiscal years 2012-13 and 2013-14.~~ All costs are adjusted from calendar year to fiscal year periods ending June 30. The total charges shown above differ from those shown in Note 9 of Metropolitan's audited financial statements (for the fiscal years ended June 30, 2011 and June 30, 2010) in Appendix B due to the inclusion above of allowances for inflation and anticipated construction of additional State Water Project facilities. The projections above also include State Water Project refunds and credits. See "POWER SOURCES AND COSTS—State Water Project."

- (2) Minimum Operations, Maintenance, Power and Replacement ("OMP&R") represents costs which are fixed and do not vary with the amount of water delivered.
- (3) Assumptions for water deliveries through the California Aqueduct (not including SBVMWD and Desert Water/CVWD transfers and exchanges) into Metropolitan's service area and to storage programs are as follows: 1.14 million acre-feet for fiscal year 2012-13, 1.03 million acre-feet for fiscal year 2013-14, 1.03 million acre-feet for fiscal year 2014-15, 0.96 million acre-feet for fiscal year 2015-16 and 0.96 million acre-feet for fiscal year 2016-17. Availability of State Water Project supplies vary and deliveries may include transfers and storage. All deliveries are within maximum contract amount and are based upon availability, as determined by hydrology, water quality and wildlife conditions. See "METROPOLITAN'S WATER SUPPLY—State Water Project—Endangered Species Act Considerations" in this Appendix A.
- (4) Annual totals include BDCP related costs for the fiscal years ended June 30, 2013 through June 30, 2017 of \$11.6 million, \$5.5 million, \$7.0 million, \$8.2 million and \$15.6 million, respectively. BDCP related costs are included in Capital Costs and Minimum OMP&R costs.

Other Long-Term Commitments

Metropolitan also has various ongoing fixed annual obligations under its contract with the United States for power from the Hoover Power Plant. Under the terms of the Hoover Power Plant contract, Metropolitan purchases energy to pump water through the Colorado River Aqueduct. In fiscal year 2011-12 Metropolitan paid approximately \$19.9 million under this contract. Payments made under the Hoover Power Plant contract are treated as Operation and Maintenance Expenditures. See "POWER SOURCES AND COSTS—Colorado River Aqueduct" in this Appendix A.

Defined Benefit Pension Plan

Metropolitan is a member of the California Public Employees' Retirement System ("PERS"), a multiple-employer pension system that provides a contributory defined-benefit pension for substantially all Metropolitan employees. PERS provides retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. PERS acts as a common investment and administrative agent for participating public entities within the State. PERS is a contributory plan deriving funds from employee contributions as well as from employer contributions and earnings from investments. A menu of benefit provisions is established by State statutes within the Public Employees' Retirement Law. Metropolitan selects optional benefit provisions from the benefit menu by contract with PERS.

Metropolitan makes biweekly contributions to PERS based on actuarially determined employer contribution rates. The actuarial methods and assumptions used are those adopted by the PERS Board of Administration. Employees are required to contribute seven percent of their earnings (excluding overtime pay) to PERS. Pursuant to current memoranda of understanding, Metropolitan contributes the requisite seven

percent contribution for all employees represented by the Management and Professional Employees Association, the Association of Confidential Employees, Supervisors and Professional Personnel Association and AFSCME Local 1902. Metropolitan also contributes the entire seven percent on behalf of the unrepresented employees. In addition, Metropolitan is required to contribute the actuarially determined remaining amounts necessary to fund the benefits for its members.

The contribution requirements of the plan members are established by State statute and the employer contribution rate is established and may be amended by PERS. For fiscal year 2011-12, Metropolitan contributed 14.48 percent of annual covered payroll. In addition, since July 1, 2001, Metropolitan has paid the 7 percent employees' share of the PERS contribution. The fiscal year 2011-12 annual pension cost was \$40.3 million, of which \$13.2 million was for Metropolitan's pick-up of the employees' 7 percent share. For fiscal year 2012-13, Metropolitan is required to contribute 15.0 percent of annual covered payroll, in addition to member contributions paid by Metropolitan. The fiscal year 2011-12 contribution requirement is based on the June 30, 2009 valuation report and the fiscal year 2012-13 contribution requirement is based on the June 30, 2010 valuation report. The June 30, 2010 actuarial valuation report includes a projected employer contribution rate for fiscal year 2013-14 of 15.4 percent of annual covered payroll, based on PERS' projected investment return for fiscal year 2010-11 of 20.0 percent, and a projected employer contribution rate for fiscal year 2014-15 of 15.7 percent of annual covered payroll, based on PERS' projected investment return for fiscal year 2011-12 of 7.75 percent. As of June 30, 2010, the date of the most recent actuarial valuation report available from PERS, the actuarial and market values of assets in Metropolitan's pension plan were approximately \$1.351 billion and \$1.058 billion, respectively. The plan had an unfunded liability of approximately \$212 million (86.4 percent funded based on actuarial value of assets and 67.7 percent funded based on market value), reflecting the impact of financial market conditions as of that date, which resulted in decreased valuation of PERS assets. This compares to the plan's unfunded liability of \$191 million as of the June 30, 2009 actuarial valuation (87.1 percent funded based on actuarial value of assets and 63.6 percent funded based on market value), \$102 million as of the June 30, 2008 actuarial valuation (92.3 percent funded based on actuarial value of assets and 94.1 percent funded based on market value), and \$95 million as of the June 30, 2007 actuarial valuation (92.4 percent funded based on actuarial value of assets and 107 percent funded based on market value). The pension plan had excess assets of \$95 million as of the June 30, 2002 actuarial valuation. The increase in unfunded liability is due to the draw-down of excess assets relating to the employer pick-up of the employees' 7 percent share and prior asset losses in PERS investments, and the recognition of gains and losses on an actuarial basis over a "smoothing" period. The actuarial value of PERS assets since fiscal year 2003-04 is based on a policy to smooth the market value of investments over a fifteen-year period to reduce the volatility of employers' future contributions and stabilize pension costs. However, in June 2009, the PERS Board adopted temporary modifications to the asset smoothing method in order to phase in over a three year period the impact of the 24 percent investment loss experienced in fiscal year 2008-09. In its June 2010 valuation report, PERS continued the effects of the temporary modification. The phase-in provides short-term relief to local government employers and is designed to strengthen the long-term financial health of the pension funds. For more information on the plan, see Appendix B - "THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA INDEPENDENT AUDITOR'S REPORT AND FINANCIAL STATEMENTS AS OF FISCAL YEARS ENDED JUNE 30, 2011 AND JUNE 30, 2010 AND BALANCE SHEETS AND STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS AS OF AND FOR THE NINE MONTHS ENDED MARCH 31, 2012 AND MARCH 31, 2011 (UNAUDITED)."

Metropolitan provides post-employment medical insurance to retirees. Metropolitan currently pays the post-employment medical insurance premiums to PERS. Metropolitan funds such benefits on a pay-as-you-go basis. Payments for this benefit were \$12.8 million in fiscal year 2011-12 and are estimated to be \$14.8 million in fiscal year 2012-13. Under Governmental Accounting Standards Board Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, Metropolitan was required to account for and report the outstanding obligations and commitments related to such benefits, commonly referred to as other postemployment benefits ("OPEB"), on an accrual basis for the

fiscal year ended June 30, 2008. Metropolitan began accounting for and reporting its OPEB obligations beginning with its financial statements for the fiscal year ended June 30, 2006.

Metropolitan's annual required OPEB contribution was \$46.3 million in fiscal year 2011-12. Pay-as-you-go contributions were \$12.8 million in fiscal year 2011-12, which represent 27.6 percent of the annual required contribution. The required contribution was based on a January 1, 2011 actuarial valuation using the entry-age normal actuarial cost method with contributions determined as a level percent of pay. The actuarial assumptions included (a) a 4.5 percent investment rate of return, (b) a general inflation component of 3.0 percent and (c) increases to basic medical premiums of 9.0 percent for non-Medicare plans for 2013, grading down to 5.0 percent for 2021 and thereafter. As of January 1, 2011, the date of the actuarial report, the unfunded OPEB liability was estimated to be \$545 million. The June 30, 2007 unfunded actuarial accrued liability is amortized over a fixed 30-year period starting with fiscal year 2007-08-08 and ending in 2037. Assumption changes are amortized over a fixed 20-year period ~~starting with fiscal year 2009-10.~~ Actuarial gains and losses are amortized over a rolling 15-year period. Metropolitan intends to begin OPEB funding above annual pay-as-you-go amounts beginning in fiscal year 2012-13 at \$5.0 million, increasing by \$5.0 million per fiscal year to an annual funding amount of \$25.0 million, beginning in fiscal year 2016-17.

HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES

The table below, for fiscal years 2008-09 through 2011-12, provides a summary of revenues and expenditures of Metropolitan prepared on a cash basis, which conforms to the Revenue Bond Resolution provisions regarding rates and additional Bonds (as defined in the Master Resolution) and Parity Obligations (as defined in the Master Resolution). See "METROPOLITAN EXPENDITURES—Limitations on Additional Revenue Bonds" in this Appendix A. Under cash basis accounting, water sales revenues are recorded when received (two months after billed) and expenses when paid (approximately one month after invoiced). The financial projections for fiscal years 2012-13 through 2016-17, are prepared on a modified accrual basis. This is consistent with the adopted biennial budget for fiscal years 2012-13 and 2013-14, which was prepared on a modified accrual basis instead of a cash basis. The table does not reflect the accrual basis of accounting, which is used to prepare Metropolitan's annual audited financial statements. The modified accrual basis of accounting varies from the accrual basis of accounting in the following respects: depreciation and amortization will not be recorded and payments of debt service will be recorded when due and payable. Under the modified accrual basis of accounting, revenues are recognized in the fiscal year in which they are earned and expenses are recognized when incurred. Thus water sales revenues are recognized in the month the water is sold and expenses are recognized when goods have been received and services have been rendered. As a result of this change, projected revenues are \$11 million greater in fiscal year 2012-13 and \$17 million greater in fiscal year 2013-14 than under the previous cash basis of accounting. Projections of expenditures are not materially affected by this change. The change to modified accrual accounting is for budgeting purposes and Metropolitan will continue to calculate compliance with its rate covenant, limitations on additional bonds and other financial covenants in the Resolutions in accordance with their terms.

The projections are based on assumptions concerning future events and circumstances that may impact revenues and expenditures and represent management's best estimates of results at this time. See footnotes to the table below entitled "HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES" and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES" for relevant assumptions, including projected water sales and average annual increase in the effective water rate, and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES" for a discussion of potential impacts. Some assumptions inevitably will not materialize and unanticipated events and circumstances may occur. Therefore, the actual results achieved during the projection period will vary from the projections and the variations may be material.

In addition to the Parity Bonds currently outstanding and the Bonds described in the ~~Official~~ *Offering Statement*, Metropolitan anticipates issuing approximately \$930 million aggregate principal amount of debt through fiscal year 2016-17 to finance the CIP. In September 2004 Metropolitan adopted a goal to maintain a minimum fixed charge coverage ratio, measuring total coverage of all fixed obligations (which includes all revenue bond debt service obligations, State Water Contract capital payments paid from current year operations and subordinate obligations) after payment of operating expenditures, of 1.2 times. This goal is subject to change by future action of Metropolitan's Board.

Estimated revenues and expenditures are based on assumptions and estimates used in the adopted biennial budget for fiscal years 2012-13 and 2013-14. In addition, the forecasted revenues and expenditures for fiscal year 2012-13 through fiscal year 2016-17 reflect the issuance of additional bond sales projected over this period. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES—Water Sales Receipts" in this Appendix A.

The projections in the table below assume that water sales will be 1.7 million acre-feet in fiscal year 2012-13, 1.7 million acre-feet in fiscal year 2013-14 and 1.75 million acre-feet in fiscal years 2014-15, 2015-16 and 2016-17, respectively. Rates and charges increased by 7.5 percent, effective January 1, 2012, and will increase by 5.0 percent on January 1, 2013 and 5.0 percent on January 1, 2014. Rates and charges are projected to increase 3.0 percent annually thereafter. Actual rates and charges to be effective in 2015 and thereafter are subject to adoption by Metropolitan's Board. The projections were prepared by Metropolitan and have not been reviewed by independent certified public accountants or any entity other than Metropolitan. Dollar amounts are rounded.

Metropolitan's resource planning projections are developed using a comprehensive analytical process that incorporates demographic growth projections from recognized regional planning entities, historical and projected data acquired through coordination with local agencies, and the use of generally accepted empirical and analytical methodologies. See "METROPOLITAN'S WATER SUPPLY—Integrated Water Resources Plan and"—The Integrated Resources Plan Strategy" in this Appendix A. Metropolitan has conservatively set the water sales projections in the following table which are below its projections for resource planning purposes. Metropolitan estimates that its water sales projections have a seventy percent statistical likelihood of being exceeded, compared to the fifty percent exceedance levels in the projections of water sales used to set prior years' budgets and rates. Nevertheless, Metropolitan's assumptions have been questioned by directors representing SDCWA on Metropolitan's Board. Metropolitan has reviewed SDCWA's concerns and, while recognizing that assumptions may vary, believes that the estimates and assumptions that support Metropolitan's projections are reasonable and the best estimates available at this time, based upon history, recent experience and other factors as described above.

HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES^(a)
(Dollars in Millions)

	-----Actual-----				-----Projected-----				
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Receipts from Water Sales ^(b)	\$988	\$1,011	\$996	\$1,062	\$1,184	\$1,241	\$1,326	\$1,370	\$1,422
Additional Revenue Sources ^(c)	120	135	153	167 168	174	182	200	210	221
Total Operating Revenues	1,108	1,146	1,149	1,230	1,358	1,423	1,526	1,580	1,643
O&M, CRA Power and Water Transfer Costs ^(d)	(532)	(551)	(531)	(476)	(492)	(503)	(555)	(578)	(602)
Total SWC OMP&R and Power Costs ^(e)	(251)	(274)	(322)	(316)	(425)	(400)	(414)	(414)	(429)
Total Operation and Maintenance	(782)	(825)	(853)	(792)	(917)	(903)	(969)	(992)	(1,031)
Net Operating Revenues	\$ 326	\$ 321	\$ 296	\$ 438	\$ 441	\$520	\$557	\$ 588	\$612
Miscellaneous Revenue ^(f)	20	33	74	56	19	19	19	19	19
Sales of Hydroelectric Power ^(g)	23	19	22	31	24	21	21	25	25
Interest on Investments ^(h)	32	19	17	11	13	13	15	16	17
Adjusted Net Operating Revenues ⁽ⁱ⁾	401	392	409	535 536	497	573	612	648	673
Bonds and Additional Bonds Debt Service ^(j)	(223)	(244)	(277)	(296) 297	(305)	(308)	(316)	(325)	(336)
Subordinate Revenue Obligations ^(k)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Funds Available from Operations	\$ 177	\$ 147	\$ 131	\$ 238	\$ 191	\$ 264	\$ 295	\$ 322	\$336
Bonds and Additional Bonds Debt Service Coverage ^(l)	1.80	1.61	1.48	1.81	1.63	1.86	1.94	1.99	2.00
Debt Service Coverage on all Obligations ^(m)	1.79	1.60	1.47	1.80	1.62	1.85	1.93	1.99	2.00
Funds Available from Operations	\$ 177	\$ 147	\$ 131	\$ 238	\$ 191	\$ 264	\$ 295	\$ 322	\$336
Other Receipts (Expenditures)	(8)	(5)	(2)	(3)	(8)	(11)	(8)	(9)	(9)
Pay-As-You Go Construction	(31)	(35)	(45)	(45)	(55)	(125)	(125)	(125)	(125)
Water Transfer Capital Costs	(8)	(12)	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Total SWC Capital Costs Paid from Current Year Operations	(86)	(115)	(119)	(112)	(127)	(123)	(145)	(158)	(168)
Remaining Funds Available from Operations	44	(20)	(35)	77	1	5	17	30	34
Fixed Charge Coverage ⁽ⁿ⁾	1.30	1.09	1.03	1.31	1.15	1.33	1.33	1.34	1.33
Tax Receipts	105	97	88	90	83	81	61	56	51
General Obligation Bonds Debt Service	(49)	(48)	(39)	(39)	(40)	(40)	(23)	(23)	(23)
SWC Capital Costs Paid from Taxes	(56)	(49)	(49)	(51)	(43)	(41)	(38)	(33)	(28)
Net Funds Available from Current Year	\$ 44	\$ (20)	\$ (35)	\$ 77	\$ 1	\$ 5	\$ 17	\$ 30	\$ 34

Source: Metropolitan.

(a) Unaudited. Prepared on a cash basis for fiscal years ended June 30, 2009 through fiscal year ending June 30, 2012, and on a modified accrual basis for fiscal years ending June 30, 2013 through June 30, 2017.

(Footnotes continued on next page)

- (b) During the four fiscal years ended June 30, 2009 through June 30, 2012, annual water sales (in acre-feet) were 2.17 million, 1.86 million, 1.63 million and 1.68 million (including 225,000 acre-feet of replenishment sales), respectively. See "METROPOLITAN REVENUES—Water Sales Revenues," table entitled "SUMMARY OF WATER SOLD AND WATER SALES RECEIPTS" in this Appendix A. The water receipts projections are based upon estimated annual water sales (in acre-feet) of 1.7 million in fiscal year 2012-13, 1.7 million in fiscal year 2013-14 and 1.75 million in fiscal years 2014-15, 2015-16 and 2016-17, respectively. Projections reflect Board adopted rate and charge increases of 7.5 percent, which became effective on January 1, 2011, 7.5 percent, which became effective on January 1, 2012, 5.0 percent, effective on January 1, 2013 and 5.0 percent, effective on January 1, 2014. Rates and charges are projected to increase 3.0 percent per fiscal year thereafter, subject to adoption by Metropolitan's Board. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES" below.
- (c) Includes receipts from water standby, readiness-to-serve and capacity charges. The term Operating Revenues excludes ad valorem taxes. See "METROPOLITAN REVENUES — Additional Revenue Components" in this Appendix A.
- (d) Water Transfer Costs are included in Operation and Maintenance Expenditures for purposes of calculating the debt service coverage on all Obligations.
- (e) Includes on and off aqueduct power and operation, maintenance, power and replacement costs payable under the State Water Contract. See "METROPOLITAN EXPENDITURES—State Water Contract Obligations" in this Appendix A.
- (f) Includes lease and rental net proceeds, net proceeds from sale of surplus property and federal interest subsidy payments for Build America Bonds of \$6.6 million in fiscal year 2009-10, \$3.6 million in fiscal year 2010-11, \$6.6 million in fiscal year 2011-12 and \$13 million in fiscal year 2012-13 through fiscal year 2016-17. Includes in fiscal year 2010-11, \$8 million from surplus property sales and a \$28.2 million capital reimbursement received from the Calleguas Municipal Water District in fiscal year 2010-11 related to termination of the Las Posas water storage program. See "REGIONAL WATER RESOURCES—Local Water Supplies—Groundwater Storage Programs." Also includes in fiscal year 2011-12 \$27.5 million from CVWD for delivery of 105,000 acre-feet under an exchange agreement between Metropolitan and CVWD. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct—Quantification Settlement Agreement."
- (g) Includes Colorado River Aqueduct power sales.
- (h) Does not include interest applicable to Bond Construction Funds, the Excess Earnings Funds, other trust funds and the Deferred Compensation Trust Fund.
- (i) Adjusted Net Operating Revenues is the sum of all available revenues that the revenue bond resolutions specify may be considered by Metropolitan in setting rates and issuing additional Bonds and Parity Obligations.
- (j) Includes debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011 and additional Bonds (projected). Assumes the issuance of additional Bonds as follows: \$180 million in fiscal year 2012-13, \$180 million in fiscal year 2013-14, \$200 million in fiscal year 2014-15, \$180 million in fiscal year 2015-16 and \$190 million in fiscal year 2016-17. See "OPERATING REVENUES AND DEBT SERVICE—Anticipated Financings" in the [Official Offering Statement](#).
- (k) Consisting of subordinate lien California Safe Drinking Water Revolving Fund Loan debt service. See "METROPOLITAN EXPENDITURES—Subordinate Revenue Obligations" in this Appendix A.
- (l) Adjusted Net Operating Revenues divided by the sum of debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011 and additional Bonds (projected).
- (m) Adjusted Net Operating Revenues, divided by the sum of debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011, the subordinate lien California Safe Drinking Water Revolving Fund Loan and additional Bonds (projected). See "METROPOLITAN EXPENDITURES—Subordinate Revenue Obligations" in this Appendix A.
- (n) Adjusted Net Operating Revenues, divided by the sum of State Water Contract capital costs paid from current year operations and debt service on outstanding Bonds, the parity lien State Revolving Fund Loan which was repaid on July 1, 2011, the subordinate lien California Safe Drinking Water Revolving Fund Loan, and additional Bonds (projected).

MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES

Water Sales Receipts

Metropolitan relies on receipts from water sales for about 75 to 80 percent of its total revenues. Metropolitan's Board has adopted annual increases in water rates each year beginning with the rates effective January 1, 2004. See "METROPOLITAN REVENUES—Rate Structure" and "—Classes of Water Service" in this Appendix A. Effective January 1, 2009, base water rates and charges increased by 9.8 percent plus a \$25 per acre-foot water supply surcharge. The combined impact was an increase of approximately 14.3 percent. Water rates and charges increased an average of 19.7 percent effective September 1, 2009, and the water supply surcharge was replaced by a \$69 per acre-foot Delta Supply Surcharge intended to recover the costs of additional water transfer purchases to augment State Water Project supplies and to be reduced as interim Delta improvements ease pumping restrictions, resulting in lower costs for additional supplies. See "METROPOLITAN'S WATER SUPPLY—State Water Project" and "—Water Transfer, Storage and Exchange Programs" in this Appendix A. On April 14, 2009, Metropolitan's Board directed staff to evaluate historical cost-of-service methodology with the intent to ensure that all rates and charges recover the full cost of service effective January 1, 2011. On April 13, 2010, Metropolitan's Board adopted a Delta Supply Surcharge of \$51 and \$58 per acre-foot, effective January 1, 2011 and January 1, 2012, respectively, with corresponding base water rate increases of 7.5 percent. The Delta Supply Surcharge is zero for calendar years 2013 and 2014. On April 10, 2012, Metropolitan's Board adopted a 5.0 percent rate and charge

increase effective January 1, 2013 and a 5.0 percent increase effective January 1, 2014. Increases in rates and charges reflect increasing operations and maintenance costs, including higher treatment costs, financing requirements of the approximately \$1.45 billion five-year CIP (covering the years 2013 to 2017), increasing State Water Project costs, and reduced water sales.

Water sales forecasts in the table above are: 1.7 million acre-feet in fiscal year 2012-13, 1.7 million acre-feet in fiscal year 2013-14 and 1.75 million acre-feet in fiscal years 2014-15 through 2016-17. For purposes of comparison, Metropolitan's water sales were approximately 2.17 million acre-feet as recently as fiscal year 2008-09, before Metropolitan implemented its Water Supply Allocation Plan on July 1, 2009.

These financial projections reflect the Board's actions to increase water rates and charges by 7.5 percent, effective January 1, 2011, 7.5 percent, effective January 1, 2012, 5.0 percent, effective January 1, 2013 and 5.0 percent, effective January 1, 2014. Rates are projected to increase 3.0 percent per year thereafter. Actual rates and charges to be effective in 2015 and thereafter are subject to adoption by Metropolitan's Board. Metropolitan is required to fix rates and charges estimated to provide operating revenues which, together with other available revenues, are sufficient to pay Metropolitan's operating expenses and provide for payment of the interest and principal of its bonds and other costs.

Metropolitan has funded a Water Treatment Surcharge Stabilization Fund and a Water Rate Stabilization Fund with a portion of the water revenues collected. The Board's stated policy is to use moneys in these funds to mitigate the need to increase water rates as a result of annual variability in water sales. Since fiscal year 2009-10, there has been no balance in the Water Treatment Surcharge Stabilization Fund. The balance in the Water Rate Stabilization Fund was \$78.4 million in fiscal year 2009-10, \$42.6 million in fiscal year 2010-11 and \$127.4 million in fiscal year 2011-12. The fiscal year 2011-12 balance includes \$50 million held in reserves pursuant to the exchange contract between Metropolitan and SDCWA due to SDCWA's litigation challenging Metropolitan's rate structure (see "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct—Sale of Water by the Imperial Irrigation District to San Diego County Water Authority"). This reserve increased by \$37 million to \$50 million at the end of fiscal year 2011-12.

The Long-Range Finance Plan adopted by the Board on March 9, 1999 provides for a minimum/maximum reserve policy based on Metropolitan's water sales during wet periods. Funds representing the minimum reserve level are held in the Revenue Remainder Fund, and any funds in excess of the minimum reserve level (up to the maximum reserve level) are held in the Water Rate Stabilization Fund. The maximum reserve level on June 30, 2012 was calculated to be \$458 million and the minimum reserve requirement as of June 30, 2012, was \$190 million. See "METROPOLITAN REVENUES—Rate Structure" and "—Litigation Challenging Rate Structure" in this Appendix A. The actual fund balances in the Water Rate Stabilization Fund, the Revenue Remainder Fund and the Water Stewardship Fund on June 30, 2012 totaled \$332 million, including \$50 million to be set aside for the SDCWA rate structure litigation. These unrestricted reserve balances include amounts held as collateral, from time to time, by Metropolitan's swap counterparties. See "METROPOLITAN REVENUES—Financial Reserve Policy" and "CAPITAL INVESTMENT PLAN—Capital Investment Plan Financing" in this Appendix A.

Water Sales Projections

Metropolitan's water sales projections are the result of a comprehensive retail demand, conservation, and local supply estimation process, including supply projections from member agencies and other water providers within Metropolitan's service area. Retail demands for water are estimated with a model driven by projections of relevant demographics provided by SCAG and SANDAG. Retail demands are adjusted downward for conservation savings and local supplies, with the remainder being the estimated demand for Metropolitan supplies. Conservation savings estimates include all conservation programs in place to date as well as estimates of future conservation program goals that will result from regional 20 percent reductions by 2020 conservation savings. See "METROPOLITAN'S WATER SUPPLY—Water Conservation." Local supplies include water produced by local agencies from various sources including but not limited to groundwater, surface water, locally-owned imported supplies, and recycled water (see "REGIONAL WATER RESOURCES").

The water sales projections are used to determine water rates and charges. In adopting the budget and rates and charges for each fiscal year, Metropolitan's board reviews the anticipated revenue requirements and projected water sales to determine the rates necessary to produce substantially the revenues to be derived from water sales during the fiscal year. Metropolitan sets rates and charges estimated to provide operating revenues sufficient, with other sources of funds, to provide for payment of its expenditures. See "—Water Sales Receipts" above.

Actual water sales are likely to vary from projections. Over the ten-year period from fiscal-year 2002-03 through 2011-12, actual water sales exceeded budgeted sales for the fiscal year in five fiscal years, with the greatest positive variance in fiscal year 2005-06 when actual sales of 2,152,818 acre-feet were 114 percent of budgeted sales (1,895,730 acre-feet). Actual sales were less than budgeted sales in five fiscal years, with the greatest negative variance in fiscal year 2010-11 when actual sales of 1,632,277 acre-feet were 85 percent of budgeted sales (1,927,875 acre-feet). Over the ten fiscal years from 2002-03 through 2011-12, average actual sales were 100 percent of average budgeted sales. In fiscal year 2011-12, actual sales were 1,676,855 acre-feet (including 225,000 acre-feet of replenishment sales), representing 93 percent of sales of 1,800,000 acre-feet in the revised budget. If actual sales exceed projections, the revenues from water sales during the fiscal year will exceed budget, resulting in an increase in financial reserves. See "METROPOLITAN REVENUES—Financial Reserve Policy." If actual sales are less than projections, Metropolitan uses various tools to manage reductions in revenues, such as reducing expenditures below budgeted levels and drawing on reserves. Metropolitan considers actual sales, revenues and expenditures, and financial reserve balances in setting rates for future fiscal years.

Operation and Maintenance Expenditures

Operation and maintenance expenditures in fiscal year 2011-12 were \$792 million, which represented approximately 66 percent of total costs. These expenditures include the costs of labor, electrical power, materials and supplies of both Metropolitan and its contractual share of the State Water Project. The cost of power for pumping water through the aqueducts is a major component of this category of expenditures.

The 2012-13 budgeted operation and maintenance expenditures are \$917 million. Metropolitan's Board adopted a budget benchmark in September 2004 to limit the annual increase in departmental operations and maintenance budgets to no more than the five-year rolling average change in the Los Angeles/Orange/Riverside Counties consumer price index. The budgeted fiscal year 2012-13 departmental expenditures of \$360 million is approximately 3.7 percent and 6.1 percent higher than expenditures in the fiscal years ending in 2012 and 2011, respectively.

POWER SOURCES AND COSTS

General

Current and future costs for electric power required for operating the pumping systems of the Colorado River Aqueduct and the State Water Project are a substantial part of Metropolitan's overall expenses. Expenditures for electric power for the Colorado River Aqueduct (not including credits from power sales and related revenues) for the fiscal years June 30, 2010, June 30, 2011 and June 30, 2012 were approximately \$42.4 million, \$46.9 million and \$30.0 million, respectively.

Expenditures for electric power and transmission service for the State Water Project were \$80.2 million (not including credits for prior period adjustments) for the fiscal year ended June 30, 2000, but increased to \$105.2 million for the fiscal year ended June 30, 2001 and \$187 million for the fiscal year ended June 30, 2002. As the market prices for energy declined from the crisis levels in 2000 and 2001, State Water Project power costs decreased to \$136.3 million for the fiscal year ended June 30, 2003. Expenditures for the fiscal years ended June 30, 2004, June 30, 2005 and June 30, 2006 were approximately \$182.3 million, \$176.8 million and \$201.4 million, respectively, showing the effect of more State Water Project deliveries. Expenditures for the fiscal years ended June 30, 2010, June 30, 2011 and June 30, 2012 were approximately \$156.1 million, \$189.8 million and \$214.1 million respectively.

Given the continuing uncertainty surrounding the electricity markets in California and in the electric industry in general, Metropolitan is unable to give any assurance with respect to the magnitude of its power costs.

Colorado River Aqueduct

Generally 55 to 70 percent of the annual power requirements for pumping at full capacity (1.25 million acre-feet of Colorado River water) in Metropolitan's Colorado River Aqueduct are secured through long-term contracts with the United States for energy generated from facilities located on the Colorado River (Hoover Power Plant and Parker Power Plant) and Edison. These contracts provide Metropolitan with reliable and economical power resources to pump Colorado River water to Metropolitan's service area.

On December 20, 2011, President Obama signed into law the Hoover Power Allocation Act of 2011 (H.R. 470). This new law requires the Western Area Power Administration to renew existing contracts for electric energy generated at the Hoover Power Plant for an additional 50 years through September 2067. The contractors will retain 95 percent of their existing power rights. The law will allow Metropolitan to continue to receive a significant amount of power from the Hoover power plant after the current contract expires in 2017.

The remaining approximately 30 to 45 percent of annual pumping power requirements for full capacity pumping on the Colorado River Aqueduct is obtained through energy purchases from municipal and investor-owned utilities or power marketers. Gross diversions of water from Lake Havasu for the fiscal years ended June 30, 2011 and June 30, 2012 were approximately 1,005,000 acre-feet and 724,413 acre-feet, respectively, including Metropolitan's basic apportionment of Colorado River water and supplies from water transfer and groundwater storage programs.

The Metropolitan-Edison 1987 Service and Interchange Agreement includes provisions for the sharing of the benefits realized by the integrated operation of Edison's and Metropolitan's electric systems. Under this agreement, with a prior year pumping operation of 1 million acre-feet, Edison provides Metropolitan additional energy (benefit energy) sufficient to pump approximately 140,000 acre-feet annually. As the amount of pumping is increased, the amount of benefit energy provided by Edison is reduced.

Under maximum pumping conditions, Metropolitan can require up to one million megawatt-hours per year in excess of the base resources available to Metropolitan from the Hoover Power Plant, the Parker Power Plant, and Edison benefit energy. Metropolitan is a member of the Western Systems Power Pool ("WSPP"), and utilizes its industry standard form contract to make wholesale power purchases at market cost. Metropolitan acquires the majority of its supplemental power from WSPP members. In calendar years 2009 and 2010, Metropolitan purchased 675,000 megawatt-hours and 755,000 megawatt-hours, respectively, of energy above its base power resources. In calendar year 2011, Metropolitan pumped approximately 705,000 acre-feet of its Colorado River water and additional supplies from other Colorado River sources and purchased about 100,000 megawatt-hours of additional energy supplies above its base power resources.

State Water Project

The State Water Project's power requirements are met from a diverse mix of resources, including State-owned hydroelectric generating facilities. DWR has long-term contracts with Nevada Energy (coal-fired energy), Morgan Stanley (unspecified energy sources), Metropolitan (hydropower), Kern River Conservation District (hydropower) and the Northern California Power Agency (natural gas generation). The remainder of its power needs are met by short-term purchases. Metropolitan pays approximately 70 percent of State Water Project power costs.

DWR is seeking renewal of the license issued by the Federal Energy Regulatory Commission ("FERC") for the State Water Project's Hyatt-Thermalito hydroelectric generating facilities at Lake Oroville. A Settlement Agreement containing recommended conditions for the new license was submitted to FERC in March 2006. That agreement was signed by over 50 stakeholders, including Metropolitan and other State Water Project contractors. With only a few minor modifications, FERC staff recommended that the Settlement Agreement be adopted as the condition for the new license. DWR issued a Final EIR for the relicensing project on July 22, 2008. On August 21, 2008, Butte County and Plumas County filed separate lawsuits against DWR challenging the adequacy of the Final EIR. This lawsuit also named all of the signatories to the Settlement Agreement as "real parties in interest," since they could be adversely affected by this litigation. A trial was conducted in late January 2012. No ruling has been issued. Regulatory permits and authorizations are required before the new license can take effect. Chief among these is a biological opinion from the National Marine Fisheries Service setting forth the terms and conditions under which the relicensing project must operate in order to avoid adverse impacts to threatened and endangered species. DWR has filed an application requesting this biological opinion. FERC has issued one-year renewals of the existing license since its initial expiration date on January 31, 2007, and is expected to issue successive one-year renewals until a new license is obtained.

DWR receives transmission service from investor-owned utilities under existing contracts and from the California Independent System Operator, a nonprofit public benefit corporation formed in 1996 pursuant to legislation that restructured and deregulated the electric utility industry in California. The transmission service provider may seek increased transmission rates, subject to the approval of FERC. DWR has the right to contest any such proposed increase. DWR may be subject to increases in the cost of transmission service as new electric grid facilities are constructed.

Energy Management Program

Metropolitan staff completed a comprehensive Energy Management and Reliability Study in late 2009 and Metropolitan's Board adopted energy management policies in August 2010 that provide objectives for future energy-related projects to contain costs and reduce Metropolitan's exposure to energy price volatility, increase operational reliability through renewable energy projects, provide a revenue stream to offset energy costs and move Metropolitan toward energy independence.

Metropolitan's Energy Management Program mandates that Metropolitan design and operate its facilities in the most energy-efficient and cost-effective manner. This program includes: setting design

standards for energy-efficient facilities; taking advantage of available rebates for energy efficiency and energy-saving projects; operating Metropolitan's facilities in the most energy-efficient manner; and continuing to investigate alternative energy sources, such as solar and wind power. Metropolitan has completed energy efficiency assessments at all five of its water treatment plants and is evaluating recommendations for proposed changes. Metropolitan has completed construction of a one-megawatt solar generation facility at the Robert A. Skinner Treatment Plant and is investigating additional solar power generation at other treatment plants and facilities. Metropolitan has begun integrating fuel-efficient hybrid vehicles into its fleet and assessing the use of alternative fuels (biodiesel) for its off-road vehicles and construction equipment. Finally, Metropolitan is assessing the feasibility of expanding its hydroelectric generation capabilities.

In February 2007, the Board authorized Metropolitan's membership in the California Climate Action Registry, a nonprofit voluntary registry for greenhouse gas emissions that was established by the California Legislature in 2000. Metropolitan began annual reporting of its certified baseline greenhouse gas inventory, or carbon footprint, in calendar year 2005 to the California Climate Action Registry. In calendar year 2010, Metropolitan's emissions reporting transitioned from the California Climate Action Registry to The Climate Registry, a nonprofit North American emission registry. Metropolitan also reports required emissions data to the California Air Resources Board ("CARB") under mandatory reporting regulations adopted pursuant to AB 32, California's Global Warming Solutions Act. On December 16, 2010, CARB adopted a regulation for a California cap on greenhouse gas emissions under AB 32, and after additional workshops, public comment and further consideration, approved the regulation on October 20, 2011, with compliance deferred to 2013. Metropolitan does not anticipate it will incur cap and trade allowance obligations in 2013.

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Description	Appendix A-082212 with headers
Rendering set	Standard

Legend:	
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Padding cell	

Statistics:	
	Count
Insertions	197
Deletions	168
Moved from	7
Moved to	7
Style change	0
Format changed	0
Total changes	379

Subject: FW: Member Agency Comments on Appendix A to Remarketing Statement

From: Office of the Board

Sent: Tuesday, February 14, 2012 9:14 AM

To: Lynne L. Heidel (lheidel@sanlawyers.com); Lynne L. Heidel (dirheidel@gmail.com); Keith Lewinger (preferred) (Keith.Lewinger@gmail.com); Fern Steiner (fsteiner@tosdalsmith.com); Fern Steiner (dirsteiner@gmail.com); Doug Willson (dirdougwilson@gmail.com); Doug Willson (dswilsoncpa@cox.net)

Cc: Kightlinger, Jeffrey; Scully, Marcia L; Breaux, Gary M; Norris, Keith R; Bennion, Sydney B; Dunn, Carissa L

Subject: Member Agency Comments on Appendix A to Remarketing Statement



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the Board of Directors

February 14, 2012

Director Lynn Heidel
Director Keith Lewinger
Director Fern Steiner
Director Doug Wilson
San Diego County Water Authority
4766 Overland Avenue
San Diego, CA 92123

Dear Directors:

Member Agency Comments on Appendix A to Remarketing Statement

Thank you for your comments to the draft Remarketing Statement for Metropolitan's Water Revenue Refunding Bonds, 2011 Series A-1 and A-3. This letter responds to written comments received from the SDCWA directors early on February 13, 2012. As noted in the discussion of the Remarketing Statement at the Finance and Insurance Committee, also on February 13, the SDCWA letter demonstrates the interactive process between the Board and staff for preparation of the Remarketing Statement and Metropolitan's Official Statements. This response is provided in conjunction with your consideration of the Remarketing Statement at today's Board meeting.

SDCWA's comment letter repeated many of SDCWA's previous comments. Metropolitan provided written responses to previous SDCWA comments on September 23, 2010, December 13, 2010, May 24, 2011, and September 8, 2011. Each of these responses is available upon request.

As stated in previous responses, Appendix A to the Remarketing Statement describes Metropolitan's historical financial performance and operations and includes five-year financial projections based on stated assumptions. The projections in the Remarketing Statement are based on assumptions in the proposed biennial budget for 2012/13 and 2013/14 presented to the Board in January 2012. These assumptions are reasonable and the best estimate of what we believe water sales will be, based on history, recent experience and other factors. Nevertheless, we have modified Appendix A's discussion

of the financial projections to disclose SDCWA's disagreement with these assumptions.

The Risk Factors section in the body of the Remarketing Statement discloses risks due to water sales volatility and variable supplies. Appendix A discusses Proposition 26, describes the historic volatility of Metropolitan's water sales and recent sales trends, points out that Metropolitan relies on receipts from water sales for 75 to 80 percent of total revenues, and states that actual water sales are likely to vary from projections. It would be speculative and inappropriate to base projections on proposed policies that are being formulated in the Long-Range Finance Plan Work Group and thereafter will be subject to debate and consideration by the Board (such as purchase order renewals or replacements, which Appendix A discloses are currently under discussion, reserve policies or the potential to increase fixed charges).

We appreciate your comments on Appendix A. Board review of Appendix A is an essential component of Metropolitan's process to assure that Remarketing Statements and Official Statements for our financings are up to date and accurately reflect disclosure of material facts relevant to Metropolitan's financial position. Staff has considered prior comments, in consultation with bond counsel and the financing team, and in each instance made every effort to confirm facts based on the totality of information then available and refined each Remarketing Statement and Official Statement, then being considered, in response to comments from members of the Board. As noted above, we regard SDCWA's comments as a restatement of prior comments. If you have additional comments, we will appreciate detail in those comments.

Any additional comments that are provided to staff by 4:00 p.m. today will be considered and reviewed with the financing team. Appendix A to the Remarketing Statement also will be included as Appendix A to the Official Statement for the refunding bond issue described at the Finance and Insurance Committee yesterday, and the financing schedules discussed yesterday call for printing of the Preliminary Official Statement for the refunding bonds on Wednesday, February 15, 2012.

Sincerely,

John V. Foley
Chairman of the Board

cc: J. Kightlinger
M. Scully
G. Breaux
K. Norris
S. Bennion
C. Dunn



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

February 10, 2012

Director Lynn Heidel
Director Keith Lewinger
Director Fern Steiner
Director Doug Wilson
San Diego County Water Authority
4766 Overland Avenue
San Diego, CA 92123

Dear Directors:

Proposed Biennial Budget and Associated Rates and Charges for FY 2012/13 and FY 2013/14

Finance and Insurance Committee Chair Grunfeld has asked me to respond to your letter dated February 3, 2012 regarding Metropolitan's Proposed Biennial Budget (Budget) and Associated Rates and Charges for 2012/2013 and 2013/2014 (Rates). Metropolitan thanks the San Diego County Water Authority for its input, comments, and questions on the Budget and Rates.

Your letter has been distributed to the Board for their review and consideration of your policy recommendations in the deliberations leading up to board action on these matters. The information you requested will be addressed in the reports and presentations for the upcoming Finance and Insurance Committee meetings and board workshops, to the extent not already provided in the January board letter, Cost of Service Studies, and other documents, or discussed at the January 24, 2012 Budget and Rates Workshop. We anticipate that the questions in your letter will be discussed and considered in these meetings, culminating in board action on the Budget and Rates.

Again, thank you for your input on this important topic.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary Breaux".

Gary Breaux
Assistant General Manager/Chief Financial Officer

cc: J. Kightlinger
MWD Directors