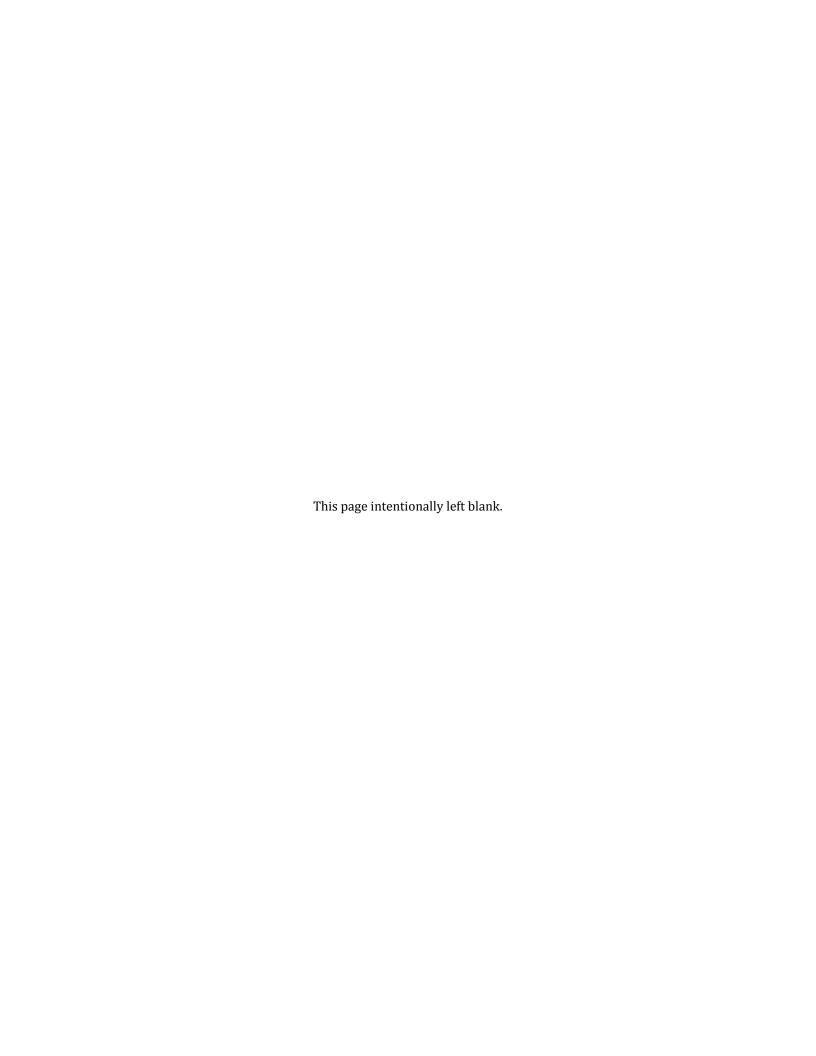




BIENNIAL BUDGET Fiscal Years 2016/17 and 2017/18 Realizing the Benefit of Sound Investments





GOVERNMENT FINANCE OFFICERS ASSOCIATION

Distinguished Budget Presentation Award

PRESENTED TO

Metropolitan Water District of Southern California California

For the Biennium Beginning

July 1, 2014

Jeffrey R. Enser

Executive Director

MWD AT A GLANCE

ORGANIZATION

Authority: The Metropolitan Water District Act (California Statutes 1927).

Incorporated: Dec. 6, 1928. First Board Meeting: Dec. 29, 1928.

Mission: To provide Metropolitan's service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Imported Water Sources: Colorado River and California State Water Project.

Service Area: About 5,200 square miles in Los Angeles, Orange, San Diego, Riverside, San Bernardino and Ventura counties.

Population Served: Approximately 19 million.

Member Agencies: 26.

Founding Cities (December 1928): Anaheim, Beverly Hills, Burbank, Colton*, Glendale, Los Angeles, Pasadena, San Bernardino*, San Marino, Santa Ana and Santa Monica.

* Withdrew in 1931.

Subsequent Member Agency Cities: Cities of Fullerton (joined 1931), Long Beach (1931), Torrance (1931), Compton (1931), and San Fernando (1971).

Municipal Water Districts: West Basin MWD (1948), Inland Empire Utilities Agency (1950), Three Valleys MWD (1950), Eastern MWD (1951), MWD of Orange County (1951), Foothill MWD (1953), Central Basin MWD (1954), Western MWD (1954), Calleguas MWD (1960), Las Virgenes MWD (1960), and Upper San Gabriel Valley MWD (1963), *County Water Authority:* San Diego (1946).

GOVERNANCE

Authority: 37. Each member agency is entitled to at least one director; additional directors are based on the agency's assessed valuation. Board meetings are generally held on the second Tuesday of each month. Check *www.mwdh2o.com* for meeting times and agendas.

FACILITIES

Colorado River Aqueduct: 242 miles from Lake Havasu to Lake Mathews, Riverside.

Construction: Began 1933, completed 1939; CRA and regional distribution system operational 1941.

Capacity: 1.3 million acre-feet[†] annually.

Pumping Plants (east to west): Whitsett Intake (lift 291 ft.); Gene (303 ft.); Iron Mountain (144 ft.); Eagle Mountain (438 ft.); Julian Hinds (441 ft.); Total lift 1,617 feet.

Siphons: 144, totaling 29 miles. Tunnels: 29, totaling 92 miles.

Canals: 63 miles.

Conduits and Pipeline: 58 miles.

Design Capacity: 1,605 cubic feet per second.

Water Treatment Plants: Joseph Jensen, Granada Hills (capacity 750 million gallons per day); Robert A. Skinner, Winchester (630 mgd); F.E. Weymouth, La Verne (520 mgd); Robert B. Diemer, Yorba Linda (520 mgd); and Henry J. Mills, Riverside (220 mgd) Reservoirs: Diamond Valley Lake, Hemet, capacity 810,000 AF; Lake Mathews, Riverside, 182,000 AF; Lake Skinner, Winchester, 44,000 AF; Copper Basin, Gene, 24,200 AF; Gene Wash, Gene, 6,300 AF; Live Oak, La Verne, 2,500 AF; Garvey, Monterey Park, 1,600 AF; Palos Verdes, Rolling Hills, 1,100 AF; and Orange County, Brea, 212 AF.

Total Reservoir Storage Capacity: 1,072,000 AF

Distribution System: 830 miles of pipelines and tunnels; about 400 connections to member agencies.

Hydroelectric Plants: 16; nameplate capacity 131 megawatts. State Water Project: Metropolitan has rights to use SWP facilities under the State Water Contract.

SUPPLY, DELIVERIES AND SALES

Average Daily Delivery: 4,900 AF (5-year avg. as of Dec. 31, 2015).

Record Daily Delivery: 9,872 AF on June 28, 1994.

Record Annual Sales: 2.5 million AF in 1990.

Unit Price (full service): Effective Jan. 1, 2016, rates are \$942 per AF for treated water, and \$594 per AF for untreated water. Effective Jan. 1, 2017, rates are \$979 per AF (treated) and \$666 per AF (untreated), and effective Jan. 1, 2018, rates are \$1,015 per AF (treated) and \$695 per AF (untreated).

Budgeted Sales Assumption: 1.70 MAF for FY 2016/17 and 2017/18.

FINANCE AND ADMINISTRATION

Water Revenue Bond Ratings: Standard & Poor's AAA; Moody's Aa1; Fitch AA+.

Budget: July 1, 2016 – June 30, 2017: \$1.649 billion July 1, 2017 – June 30, 2018: \$1.695 billion.

Capital Projects: \$200 million (FY 2016/17) \$200 million (FY 2017/18).

Employees: 1,886 budgeted regular employees FY 2016/17 (full-time equivalent positions); 1,886 employees (FTEs) FY 2017/18.

Fund Sources: Water rates and charges, 77%; fund withdrawals, 9%; taxes, 5%; hydroelectric sales and miscellaneous income, 2%; other, 7% (Biennial Budget 2016/17, 2017/18).

Uses of Funds: State Water project payments, 30%;

operations & maintenance, 21%; debt service, 17%; construction, 10%; fund deposits, 11%; demand management programs, 4%; supply programs, 4%; and Colorado River power, 3% (biennial budget 2016/17, 2017/18).

TABLE OF CONTENTS

General Manager's Transmittal Letter	1
District Overview	7
Profile	7
Mission	8
Values	8
Service Area	8
Map	9
Description and Economy	10
Strategic Plan Summary	11
Performance Indicators	12
Organization Structure	12
Member Agencies	12
Board of Directors	13
Organization Chart	13
Senior Management	14
Workforce	14
Offices	14
Financial Organization	15
Fund Structure and Descriptions	15
Financial Reporting	17
Budgetary and Accounting Basis	17
Financial Planning	17
Financial Policies	18
Budget Process	20
Balanced Budget	21
Budget Calendar	21
Department Responsibilities	22
General Manager Responsibilities	23
Rudgetary Controls	23

District Overview, continued

Budget Adjustments	23
Capital Investment Plan (CIP)	24
Structure	24
Preparation	24
District Budget Summary	27
Appropriations	27
Fund Summary	28
Sources of Funds	30
Operating Revenue	30
Capital Funding	33
Other Sources	33
Uses of Funds	34
Non-Departmental Operating Expenditures	35
Departmental O&M Budget	36
Staffing Plan	39
Capital Investment Plan	40
Fund Balances and Reserves	40
Rates, Fees and Charges	43
Overview of Rate Structure	43
Rates, Fees and Charges table	45
Operating Expenditures	51
Departmental Operating Budgets	51
Understanding the Layout	51
Office of the General Manager	53
Water System Operations	59
Water Resource Management	67
Engineering Services	73
Business Technology	79
Human Resources	87
Real Property Development & Management	95
Office of Chief Financial Officer	103
External Affairs	111

Departmental Operating Budgets, continued	
General Counsel Department	119
General Auditor Department	125
Ethics Office	129
Staffing Plan Summary	135
Operating Equipment Summary	136
Key Performance Indicators	137
Non-Departmental Budgets	141
State Water Project	141
CRA Power	145
Supply Programs	149
Demand Management	159
Capital Financing	163
Ten-Year Financial Forecast	169
Summary	169
Operating Budget	171
Projection of Revenues	171
Projection of Expenditures	175
Projection of Reserves	181
Capital Investments and Financing	178
Capital Expenditures	183
Introduction	183
Capital Investment Plan Development	185
Major Objectives for Fiscal Year 2016/17 and 2017/18	187
Capital Investment Plan Summary	196
Individual Appropriation Summaries	203
Appendices	267
Service Area Economy	267
Financial Powers & Policies	279
Glossary of Terms	309
Resolutions and Ordinances	317

This page intentionally left blank.

GENERAL MANAGER'S TRANSMITTAL LETTER

July 2016

This document presents Metropolitan's fiscal year (FY) 2016/17 and FY 2017/18 Biennial Budget and associated Ten-Year Financial Forecast. The Board, Finance and Insurance (F&I) Committee, and member agencies have reviewed and evaluated Metropolitan's Biennial Budget and the rates and charges necessary to support the proposed expenditures. The Ten-Year Financial Forecast of expenditures and revenues also present the implications of near-term actions on long-term revenue requirements.

The budgeted expenditures and revenues were provided to the Board on January 28, 2016 and posted online on February 5, 2016. Board workshops were held on February 8, 2016, February 23, 2016, March 7, 2016, March 22, 2016, and April 11, 2016 at the F&I Committee and these included extensive budget and revenue discussions. Public testimony was provided and considered at the public workshops, the public hearing on March 8, 2016, as well as the board meeting on April 12, 2016. Detailed information, including the proposed budget, proposed rates and charges, cost of service analysis, and cost of service report, was made available to the public on our website during the process and was considered by the Board, the F&I Committee and member agencies. In addition, Metropolitan responded to letters from 91 individuals and organizations.

BIENNIAL BUDGET

Based on the Board discussions over several months, the Biennial Budget for FY 2016/17 and FY 2017/18 meets the fixed charge coverage target, provides funding from revenues for the Capital Investment Plan (CIP), and promotes long-term fiscal sustainability goals as reflected in the Ten-Year Financial Forecast.

The Biennial Budget and revenue requirements are based on normal conditions. Calendar year 2016 is anticipated to provide a 60 percent allocation on the State Water Project (SWP) due to recent rains and snow in Northern California. The conditions in the Colorado River watershed are near normal. Assuming a 50 percent allocation on the SWP and approximately 1.0 million acre-feet (MAF) of diversions on the Colorado River Aqueduct, Metropolitan should be able to replenish its storage reserves by approximately 200 to 300 thousand acre-feet (TAF) of water.

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 by storing water in wet years to manage through dry years. Historically, Metropolitan's water sales have varied widely. Over the last twenty years, annual sales have averaged 2.0 MAF. Over the last five years, annual sales have averaged 1.8 MAF and are projected to be 1.6 MAF for FY 2016. Therefore, it is reasonable for Metropolitan to base the biennial budget and revenue requirements on a conservative annual sales estimate of 1.70 MAF, SWP deliveries of approximately 955 TAF, and Colorado River diversions of 1.0 MAF for each of FY 2016/17 and FY 2017/18. Variations in revenues and costs due to hydrology will be managed by use of financial reserves established for this purpose.

The Board approved the FY 2016/17 and FY 2017/18 Biennial Budget and water rates and charges on April 12, 2016 and authorized the following actions as summarized in Table 1:

- Appropriate \$2,431.4 million for Metropolitan O&M and operating equipment, power costs on the Colorado River Aqueduct, SWP operations, maintenance, power and replacement costs and SWP capital charges; Demand Management Programs including the local resources and conservation credits program; and costs associated with supply programs;
- Appropriate as a continuing appropriation, \$672.6 million for (FY 2016/17 and FY 2017/18) debt service on Metropolitan general obligation and revenue bonds;
- Authorize the use of \$240 million in operating revenues to fund the Capital Investment Plan;
- Adopt an overall rate increase of 4% effective January 1, 2017, and an additional 4% on January 1, 2018.

Table 1: FY 2016/17 and FY 2017/18 Operating and Capital Appropriations, \$ millions

Adopted Budget	FY 2016/17	FY 2017/18	Total Biennium
Operating Budget	\$1,200.2	\$1,231.2	\$2,431.4
Debt Service	\$328.5	\$344.1	\$672.6
PAYGo	\$120.0	\$120.0	\$240.0
Grand Total	\$1,648.7	\$1,695.3	\$3,344.0

The FY 2016/17 and FY 2017/18 Biennial Budget assumes the Board maintains the ad valorem tax rate at its current level when the rate is set in August of 2016 and 2017. The current ad valorem tax rate is estimated to generate \$199 million over the next two fiscal years, providing \$88 million to pay forgeneral obligation and State Water Contract (SWC) Burns-Porter bond debt service and \$111 million to offset other SWC costs. In addition, maintaining the ad valorem tax rate helps to maintain a balance between fixed and variable revenues and mitigates the need for future water rate increases.

The Metropolitan Water District Act limits property tax collections, but permits the Board to suspend this limitation if, following a public hearing, the Board finds that a tax in excess of the limitation is essential to the fiscal integrity of the District. The Board held a public hearing on March 8, 2016 and in April adopted the necessary finding to suspend the limitation. The Board sets the tax rate in August. If the ad valorem tax is not maintained, the projected overall rate increases in FY 2016/17 and FY 2017/18 will need to be 3 percent higher.

The budget continues funding of the Board's key priorities including:

• Funding for the CIP of \$400 million for the biennial period of FY 2016/17 and FY 2017/18, of which \$240 million will be funded from revenues. This level of revenue-funded capital is appropriate given the significant portion of the capital program that is focused on replacement and refurbishment of capital facilities, and lessens the pressure on water rates from debt service in future years. This level of revenue-funded capital will cover 60 percent of the projected capital spending for the next two fiscal years.

The level of revenue-funded capital that the water rates and charges are set to generate in FY 2016/17 and FY 2017/18 is lower than the \$221 million for FY 2015/16. This lower level of revenue-funded capital provides cost relief as other budgeted costs, particularly State Water Project costs, are increasing.

- Continued funding of \$161 million for the biennial period of FY 2016/17 and FY 2017/18 for Supply Programs in the region, the Central Valley, and the Colorado River system to cover the costs of storing or withdrawing supplies. This funding helps reduce the likelihood that Metropolitan will need to declare a Water Supply Allocation in future dry years.
- Continued funding of Demand Management Programs at \$151 million for the biennial period of
 FY 2016/17 and FY 2017/18. Demand Management Programs incentivize the development of local
 water supplies and the conservation of water to reduce the need to transport water into the
 Metropolitan service area or within Metropolitan's distribution system. These programs also help
 Metropolitan's member agencies and their retail water subagencies meet the state-mandated 20
 percent by 2020 goal of reduced per capita water consumption and meet the 2015 Integrated
 Resources Plan Update goals for local resource development.
- Funding of \$838 million for the biennial period of FY 2016/17 and FY 2017/18 for Operations and Maintenance (0&M), including labor and benefits, water treatment chemicals, solids handling, professional services, and operating equipment purchases. This proposed 0&M funding includes increased benefit costs, including retirement-related benefits and merit increases.
- Funding of \$1,282 million for the SWC and Colorado River power costs for the biennial period of FY 2016/17 and FY 2017/18 to ensure a reliable water supply to southern California.
- Rate increases in the remaining eight years of the Ten-Year Financial Forecast ranging from 4 to 5 percent, which meet all financial policy guidelines.

TEN-YEAR FINANCIAL FORECAST

The Biennial Budget and Ten-Year Financial Forecast comprise Metropolitan's long-range financial plan. The Biennial Budget establishes the foundation for a ten-year forecast of water sales, expenditures, revenues, projected rate increases and financial indicators. Incorporating a ten-year financial forecast within the biennial budget process helps ensure the long-range financial plan is continuously updated every two years to reflect any changes in underlying assumptions and/or financial policies. This approach is well suited to the dynamic environment Metropolitan operates in, rather than periodic updates of a stand-alone long-term financial planning document.

The Biennial Budget sets the stage for predictable and reasonable rate increases over the ten-year planning period. Use of operating revenue funding for the CIP will result in lower revenue requirements in later years of the forecast, as the use of operating revenues to fund the CIP will reduce the need for new money bond issues resulting in stable to lower debt service over the ten-year forecast. These lower costs combined with maintaining the ad valorem tax rate at its current level throughout the ten-year period will mitigate increases in future water rates and charges.

Included in the Ten-Year Financial Forecast is an assumption that the California WaterFix moves forward. The projected annual rate increases of 4% to 5% accommodate the expected Metropolitan share of this project.

Key financial indicators of the Ten-Year Financial Forecast are summarized in Figure 1.

Unrestricted Reserve Target Reserve Minimum Reserve 1000 900 800 700 Million Dollars 600 500 400 300 490 408 422 395 397 200 100 0 2015 2016 2017 2018 2019 2020 2022 2023 2024 2025 2026 2021 **Fiscal Year Ending** Ave Rate Increase 1.5% 1.5% 4.0% 4.0% 4.5% 4.5% 4.5% 4.5% 4.5% 4.5% 4.5% 4.5% 1.70 1.75 1.75 1.75 1.75 1.80 1.80 1.80 1.80 Sales, MAF 1.90 1.63 1.70 Rev. Bond Cvg 2.7 1.5 1.6 1.6 1.7 1.8 1.9 2.0 2.3 2.4 2.6 2.7 Fixed Chg Cvg 2.4 1.3 1.3 1.3 1.4 1.4 1.4 1.4 1.5 1.5 1.5 1.5 PAYGO, \$M 210 284* 120 120 120 120 120 123 127 130 133 **137**

Figure 1: Projected Rate Increases, Reserves, and Financial Indicators

* includes PVID land purchases

The Ten-Year Financial Forecast assumes the following:

- Sales are forecasted to range from 1.70 MAF in FY 2016/17 to 1.80 MAF in FY 2025/26;
- Beginning in FY 2016/17, 60 percent of the CIP is revenue funded. Revenue-funding a percentage of the CIP costs rather than using a fixed dollar amount allows revenue-based funding to adjust to changes in the CIP over time;
- Metropolitan's investments in storage programs continue, providing regional supply reliability; and
- Demand Management Programs continue to be funded to incentivize the development of local
 water supplies and the conservation of water to reduce the need to transport water into the
 Metropolitan service area or within Metropolitan's distribution system, and also help ensure that
 Metropolitan's member agencies and their retail water subagencies meet the 20 percent by 2020
 goal of reduced per capita water consumption.
- Assumes Metropolitan pays its share of the proposed California WaterFix.
- Resulting rate increases beyond the biennial budget period are in a range of 4 percent to 5 percent each year.

Additional detail regarding Metropolitan's ten-year forecast is contained in the Ten-Year Financial Forecast section of this Biennial Budget Document.

RESERVES

Fund balances are budgeted to be \$1.45 billion at June 30, 2017. Of that total, \$746.3 million is restricted by bond covenants, contracts of board policy, and \$395.9 million is unrestricted and undesignated. In addition, fund balances are budgeted to be \$1.50 billion at June 30, 2018. Of that total, \$761.6 million would be restricted by bond covenants, contracts or board policy, and \$383.1 million is unrestricted and undesignated.

On June 30, 2017, the targets for the minimum and target reserve funds are estimated to be \$247.2 million and \$600.6 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the Water Rate Stabilization Fund (WRSF) and Revenue Remainder Fund will total about \$395.9 million, approximately\$148.7 million over the minimum level.

On June 30, 2018, the targets for the minimum and target reserve funds are estimated to be \$257.3 million and \$626.9 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the WRSF and Revenue Remainder Fund will total about \$383.1 million, about \$125.8 million over the minimum level.

GENERAL MANAGER'S BUSINESS PLAN

The biennial budget is intended to provide funding for Metropolitan's operations, capital programs and all ancillary functions of Metropolitan for FYs 2016/17 and 2017/18. The key strategic priorities that the Office of the General Manager will be focused on for the period covered by the Biennial Budget are addressed below.

Strategic Priority #1: Complete the Bay Delta Conservation Plan/California WaterFix (BDCP/CA WaterFix) Environmental Impact Report/Statement

During FY 2016/17, the goal will be to complete the environmental documentation and necessary financing agreements so that Metropolitan's Board of Directors can make a sound business decision on participation in and implementation of the BDCP/CA WaterFix.

Interim steps in this process that will be completed during this time period include organizing and developing procedures and structures to handle the mechanics and logistics of managing a mega-construction project, including but not limited to: establishing and staffing a construction office; developing appropriate specifications for equipment procurement, design and construction; establishing procedures for land acquisition and habitat development; creating approaches for interim and long-term project financing; and preparing all necessary permitting documentation.

In addition, staff will continue near-term efforts to provide greater reliability of State Water Project (SWP) supplies. These actions include identifying and pursuing early-action habitat projects that satisfy current permit obligations and will also be compatible with the BDCP/CA WaterFix. Staff will also pursue implementation of new management techniques for species in the Delta including development of new models for species life cycles, turbidity monitoring and other approaches all designed to lead to better management of water supplies while enhancing protection for endangered species.

Finally, staff will continue implementation of the Delta Flood Emergency Preparedness, Response Recovery Plan in the event of a catastrophic interruption of water supplies due to earthquake or flood damage.

Strategic Priority #2: Develop Water Supplies and Manage Water Reserves

Staff will work closely with the Board to manage Metropolitan's water supply reserves in the face of unprecedented drought conditions in California and throughout the Southwest. Should El Niño conditions create more supply, staff is prepared to maximize storage opportunities. On the other hand, should supply conditions not improve then actions will include implementation of storage withdrawals, coordination of deliveries with the member agencies, close monitoring of drought conditions and possible allocation actions as part of the Water Surplus and Drought Management (WSDM) plan, and targeted outreach on conservation efforts. The past year's successful implementation of the Water Supply Allocation Plan (WSAP) will be reviewed and a determination will be made on what actions to take for FY 2016/17.

Strategic Priority #3: Embark on Strategic Review of Metropolitan's Mission and Programs

Periodically the Board has reviewed its policies and mission to ensure they fit with the times. Many significant policy issues have arisen from the historic drought conditions and were discussed in the 2015 Integrated Resources Plan (IRP) update. FY 2016/17 presents an opportune time for Metropolitan to review its policies and determine if changes or refinements should be made as critical decisions are made on broader California water policy matters.

Strategic Priority #4: Educate the Public and Stakeholders on Critical Water Supply Conditions and Critical Water Management Decisions.

The coming two years represent a major crossroad for California water. The drought that gripped California has caused unprecedented water conditions for much of California and led to a dramatic response at the state and federal level. The impact from these conditions will resonate through 2017 and beyond. Additionally, key decisions will occur on a Bay Delta plan, significant legislative proposals for statewide action and key Colorado River milestones. It will be essential to fully engage the public and key stakeholders in Metropolitan's service area and statewide on the importance of these issues, as decisions made over the next two years will impact California water for decades to come.

Strategic Priority #5: Employee Development

The Biennial Budget calls for Metropolitan to cease its managed attrition that has shrunk Metropolitan from 2,400 full-time employee positions to a current workforce of approximately 1,770. Recruitment activity will be expanded to keep pace with retirements and fund the work force at approximately 1,840 positions over the next two years. Increased employee cross-training and employee development efforts will be needed to meet the challenge of retirements brought about by a reduced workforce.

6

Jeffrey Kightlinger

General Manager

Gary Breaux

Chief Financial Officer

DISTRICT OVERVIEW

District Profile

The Metropolitan Water District of Southern California (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 (the Act)). Metropolitan has 26 member public agencies and its primary purpose is to provide its members with a supplemental wholesale water supply service for domestic and municipal uses. Metropolitan may develop, store, and distribute water for domestic and municipal purposes, and other beneficial uses if excess water is available, and may provide, generate, and deliver electric power within or without the state for the purpose of developing, storing, and distributing water.

Metropolitan is governed by a 38-member board of directors representing the 26 member agencies. Metropolitan directors are selected by their respective member agencies and some also serve on the governing body of that particular member agency. All powers, privileges and duties vested in or imposed upon Metropolitan are exercised and performed by and through its Board of Directors. Board and committee meetings are open to the public and are broadcast on the Internet through Metropolitan's website, www.mwdh2o.com. A schedule of board and committee meetings is available on the Web.

To supply Southern California with reliable and safe water, Metropolitan imports water from the Colorado River and Northern California to supplement local supplies, and helps its member agencies develop increased water conservation, recycling, storage and other local resource programs. Metropolitan was established to obtain an allotment of Colorado River water and to construct and operate the 242-mile Colorado River Aqueduct (CRA), which runs from an intake at Lake Havasu on the California-Arizona border, to an endpoint at Metropolitan's Lake Mathews reservoir in Riverside County. Metropolitan owns and operates an extensive range of capital facilities including the CRA, 16 hydroelectric facilities, nine reservoirs, 830 miles of large-scale pipes, and five water treatment plants. Four of these treatment plants are among the 10 largest plants in the nation. In fact, Metropolitan is the largest distributor of treated drinking water in the United States.

In 1960, Metropolitan, along with 30 other public agencies, signed a long-term contract with the state for supply and transportation of water from the State Water Project (SWP). The SWP is the largest state-built, user-financed water project in the country. Its facilities were constructed with several general types of financing, the repayment of which is made by the 29 agencies and districts that have long-term contracts with the state (the State Water Contractors). The State Water Contractors also pay for the operations, maintenance, power, and replacement costs of the SWP, as the State Water Contracts are the basis for all SWP construction and ongoing operations. As the largest of the now 29 contractors, Metropolitan contracts with the state Department of Water Resources (DWR), which operates the SWP, for slightly less than half of all SWP supplies. Water supplies from the SWP are conveyed to Metropolitan via the SWP's 444-mile California Aqueduct, which was made possible pursuant to Metropolitan's State Water Contract; the SWP serves urban and agricultural agencies from the San Francisco Bay area to Southern California.

To secure additional supplies, Metropolitan also has groundwater banking partnerships and water transfer arrangements within and outside of its service area. Metropolitan also provides financial incentives to its member agencies for local investments in water management projects and programs. An increasing percentage of Southern California's water supply comes from these local resources, including conservation, water recycling and recovered groundwater.

To pay for its costs, 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 is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan's service area.

Mission

The mission of Metropolitan is to provide its 5,200-square-mile service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Periodically the Board has reviewed its policies and mission to ensure they fit with the times. In FY 2016/17, the General Manager intends to embark on a strategic review of Metropolitan's Mission and Programs.

Core Values

Metropolitan's core values include the following:

- o Integrity
- Stewardship
- o Diversity
- o Open Communication
- Leadership
- o Teamwork

Metropolitan 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.

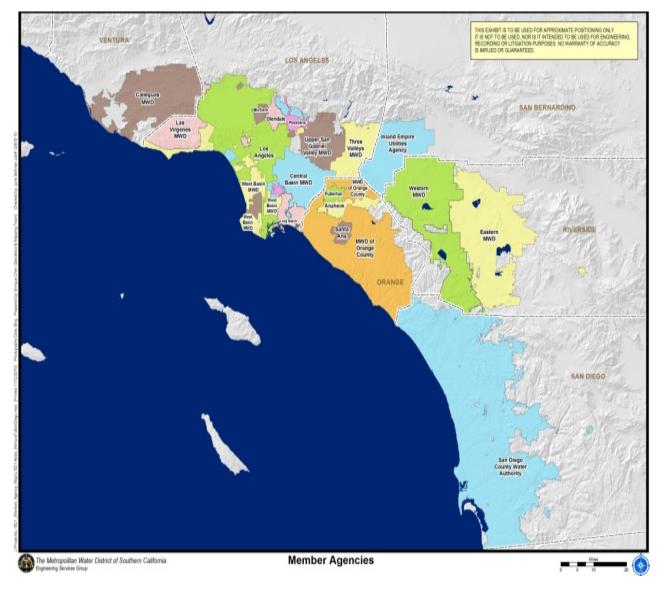
Metropolitan estimates that approximately 18.5 million people lived in Metropolitan's service area in 2014, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (SCAG) and the San Diego Association 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 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.

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.

Service Area Map

The map below shows the area served by Metropolitan. It includes parts of six of the ten counties that comprise Southern California. The area served by Metropolitan represents the most densely populated and heavily industrialized portions of Southern California.

The economy of the area served by Metropolitan is generally described in terms of data for the six-county area (Six County Area) consisting of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Although these counties comprise Metropolitan's service area, Metropolitan's territory does not encompass all of the area within each of the six counties. In 2014, the economy of the Six County Area was larger than all but fifteen nations of the world. The Six County Area economy ranked between Mexico (\$1.28 trillion) and Indonesia (\$888 billion), with an estimated gross domestic product (GDP) of just over \$1.25 trillion. The Six County Area's gross domestic product in 2014 was larger than all states except California, Texas, and New York.



Summary of Recent Trends and Outlook for the Six County Area Economy

The national economy has expanded since 2009 although at growth rates below the historical average for economic recoveries. Private sector nonfarm wage and salary job levels in August 2015 were nearly 4.3 million above the pre-recession peak level, including a gain of over 850,000 manufacturing jobs and 734,000 construction jobs since the recession low. The unemployment rate in the nation has declined from near 9.8% in November 2010 to 5.1% in August 2015.

Housing starts and new permits have rebounded as the number of foreclosures has declined and housing prices have risen in most parts of the country, although the pace of housing recovery has slowed in recent months. Consumer price increases remain well below 2% annually aided by the decline in oil prices.

The Six County Area has regained all the jobs lost during the recession and more. Revised job estimates released in March 2015 show that job gains in 2013 and 2014 were much larger than previously reported and higher than the national growth rate. Year-over-year job gains continued in 2015 and between August 2014 and August 2015 job growth for the entire Six County Area was 214,200 jobs or a gain of 2.5% compared to a 2.1% increase in jobs for the nation.

Unemployment rates in the Six County Area have declined sharply between 2010 and August 2015. In August 2015 unemployment rates ranged from a low of 5.1% in Orange County to a high of 7.0% in Riverside and Los Angeles counties. Income, taxable sales, assessed valuation and housing prices rose in 2013 and 2014. Residential building permits rebounded in 2013 and 2014 and were up 22% for the first seven months of 2015. Nonresidential permit levels reached a record \$12.3 billion in 2014 and were down 5% in the first seven months of 2015.

The Six County Area is experiencing growth in both domestic and foreign visitors. Hotel rates and occupancy are increasing in the Six County Area and the same is true for employment in the hotel and amusement park sectors. In 2014 Los Angeles County set tourism records in visitors (44.2 million), hotel occupancy rates (78.9%) and average daily rate (\$147.30). Foreign travel to the region is outpacing domestic travel with large gains in visitors from China of +20.4% in 2014 to 686,000 visitors. Air passenger travel in the Six County Area reached a record level in 2014 and was up again in 2015.

Population growth in the Six County Area since 2010 has exceeded the national average according to both the California Department of Finance ("DOF") estimates and those published by the Census Bureau. However, population growth in California and the Six County Area has been slowing since 2000 compared with previous decades. The Six County Area added an average of 230,000 residents per year between 2000 and 2005 but only an additional 154,000 residents per year in the next nine years although gains in the past three years have averaged 190,000 residents per year.

Long-term job growth is driven by the Six County Area's economic base—those sectors that sell most of their goods and services in national and world markets outside of the Six County Area. Recent projections by the Center for Continuing Study of the California Economy (CCSCE), the Southern California Association of Governments (SCAG) and the San Diego Association of Governments (SANDAG) report that the Six County Area will see job growth that slightly exceeds the national average during the next 10 to 30 years, led by gains in Professional and Business Services, Wholesale Trade, Tourism and Entertainment and Health Care.

The recent growth in taxable sales, assessed valuation and hotel occupancy in the Six County Area has led to higher revenue growth for cities and counties and allowed them to rehire some of the local government and school employees who were laid off during the recession.

For selected demographic and economic information for Metropolitan's service area or the Six County Area, please refer to the appendix which includes information on:

- o Job growth trends
- o Construction activity
- Housing trends
- Assessed valuation
- International Trade
- o Income & Wages
- Population
- o Economic structure and long term prospects

Strategic Plan Summary

The General Manager submits to the Board of Directors a business plan containing the General Manager's key priorities for the coming year for review and approval.

Five strategic priorities support Metropolitan's mission for fiscal years 2016/17 and 2017/18:

Strategic Priority #1: Complete the Bay Delta Conservation Plan/California WaterFix Environmental Impact Report/Statement.

Strategic Priority #2: Develop Water Supplies and Manage Water Reserves.

Strategic Priority #3: Embark on Strategic Review of Metropolitan's Mission and Programs.

Strategic Priority #4: Educate the Public and Stakeholders on Critical Water Supply Conditions and Critical Water Management Decisions.

Strategic Priority #5: Employee Development

For more detail on the GM's strategic priorities, please refer to the General Manager's Transmittal Letter.

The General Counsel, General Auditor and Ethics Officer also submit to the Board of Directors a business plan containing their department's key priorities for the coming year for review and approval.

The groups within the General Manager department submit their business plans to the General Manager annually for review and approval. These business plans include a group mission statement and Objectives and Actions to support the relevant General Manager's strategic priorities.

Performance Indicators

Metropolitan has developed a series of performance measures that are used to measure and maintain mission-critical processes as well as support internal decision making. These include financial, water quality, human resource, legislative, outreach, etc. measures which are closely aligned with Metropolitan's business plans, key priorities and objectives.

Please see the Operating Expenditures section for Metropolitan's performance measures including fiscal year results and targets.

Organization Structure

Member Agencies

The following table lists the 26 member agencies of Metropolitan which include 11 municipal water districts, 14 cities and one county water authority.

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

Board of Directors

Metropolitan is governed by a 38-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 38 directors.

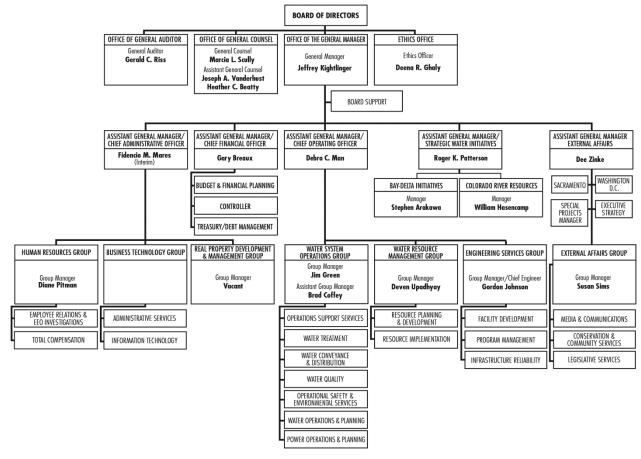
The Board includes business, professional and civic leaders. Directors serve on the Board without compensation from Metropolitan. Voting is based on assessed valuation, with each member agency being entitled to cast one vote for each \$10 million or major fractional part of \$10 million of assessed valuation 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.

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.

Organization Chart

A larger version is provided on the inside back cover of the Biennial Budget document.

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA



As of March 2, 2016

Metropolitan Senior Management

Jeffrey Kightlinger	General Manager
Marcia Scully	General Counsel
Gerald Riss	General Auditor
Deena Ghaly	Ethics Officer
Gary Breaux	Assistant General Manager/Chief Financial Officer
Debra Man	Assistant General Manager/Chief Operating Officer
Fidencio Mares	Interim Assistant General Manager / Chief Administrative Officer
Roger Patterson	Assistant General Manager/Strategic Water Initiatives
Dee Zinke	Assistant General Manager/External Affairs
Dawn Chin	Board Executive Secretary

Workforce

Metropolitan employs approximately 1,840 people. Most are represented by the American Federation of State, County and Municipal Employees (AFSCME), Local 1902; the Management and Professional Employees Association (MAPA), Local 1001; the Supervisors Association; and the Association of Confidential Employees (ACE). The four bargaining units represent approximately 99 percent of Metropolitan's employees. The remaining one percent is unrepresented.

Offices

Metropolitan's headquarters are located at 700 N. Alameda St., Los Angeles, California 90012. Metropolitan has legislative offices in Sacramento and Washington D.C.



Financial Organization

Fund Structure and Descriptions (from Metropolitan's Administrative Code)

To provide for accountability of public moneys in accordance with applicable federal and state law and regulations and Board policies, the following funds active or prospectively active have been established in the Treasury of the District:

- General Fund (Fund No. 1001, established 1929).
 - Moneys not specifically allocated or appropriated may be placed in this fund and used for general purposes of the District.
 - Expenditures for reimbursable work and water conservation capital and indirect costs under the contract with Imperial Irrigation District are paid from this fund.
- Replacement and Refurbishment Fund (Fund No. 5001, established 1988).
 - Used to finance certain capital program expenditures from current revenues in accordance with Section 5109, subject to the conditions contained in Section 5202(b).
- State Contract Fund (Fund No. 5701, established 1960).
 - o Used for the payment of capital charges under the State Water Contract, including the capital charges for off-aqueduct power facilities, subject to the conditions contained in Section 5201(d).
- Special Tax Fund (Fund No. 5702, established 1951).
 - Annexation fees (cash payments and special tax collections) are deposited in this fund and transferred to the State Contract Fund to pay a portion of State Water Contract capital charges.
- Water Revenue Fund (Fund No. 1002, established 1975).
 - o Receipts from water sales are deposited in this fund and are transferred to various other funds in accordance with revenue bond covenants and Board resolutions to pay in order of priority:
 - 1. Operation and maintenance expenditures;
 - 2. Principal of, premium, if any, and interest on the Prior Lien Waterworks Revenue Bonds and any required deposits into any reserve funds or accounts therefore;
 - 3. The interest on and bond obligation of Subordinate Lien Water Revenue Bonds and Parity Obligations issued pursuant to Master Resolution 8329 (the Master Resolution) adopted by the Board on July 9, 1991 and any Supplemental Resolutions thereto:
 - 4. All other payments required for compliance with the Master Resolution, and any Supplemental Resolutions;
 - 5. Principal of and interest on Commercial Paper Notes and other amounts due a provider of a liquidity facility;

- 6. Deposits into the Water Standby Charge Fund in accordance with resolutions imposing such charges; and
- 7. Any other obligations which are charges, liens, or encumbrances upon or payable from net operating revenues.
- o Moneys remaining at the end of each month, after the foregoing transfers, are transferred to the Revenue Remainder Fund.
- Operation and Maintenance Fund (Fund No. 1003, established 1975).
 - Used to pay all operation and maintenance expenditures, including State Water Contract operation, maintenance, power and replacement charges, subject to the conditions contained in Section 5201(f).
- Revenue Remainder Fund (Fund No. 1004, established 1975).
 - Used to maintain working capital and may be used for any lawful purpose by the District, subject to the conditions contained in Section 5202.
- Water Rate Stabilization Fund (Fund No. 5501, established 1987).
 - o Used to reduce future water revenue requirements or, as directed by the Board, for other lawful purposes, in accordance with Section 5202.
- Water Treatment Surcharge Stabilization Fund (Fund No. 5502, established 1988).
 - O Used to mitigate required increases in the surcharge for water treatment or, as directed by the Board, for other lawful purposes, in accordance with Section 5202.
- Revolving Construction Fund (Fund No. 5003, established 1988).
 - Capital expenditures made from this fund are to be reimbursed from proceeds of security sales to the extent such expenditures are authorized uses of debt proceeds under the Act, subject to the conditions and restrictions contained in Section 5201(g).
- Employee Deferred Compensation Fund (Fund No. 6003, established 1976).
 - Compensation deferred by employees under Section 457 of the Internal Revenue Code of 1986, as amended, is deposited in this fund and is withdrawn in accordance with Articles 2 and 3 of Chapter 7 of Division VI of this Administrative Code.
- Iron Mountain Landfill Closure/Postclosure Maintenance Trust Fund (Fund No. 6005, established 1990).
 - Used as a trust fund to maintain moneys sufficient to cover the costs of closure and postclosure maintenance of the District's solid waste landfill facility at Iron Mountain, in accordance with regulations of the California Integrated Waste Management Board, and subject to the conditions contained in Section 5201(l).
- Water Standby Charge Fund (Fund No. 1005, established 1992).
 - Used to separately hold revenues attributable to water standby charges; amounts deposited in this fund are used exclusively for the purpose for which the water standby charge was authorized.

- Water Transfer Fund (Fund No. 1007, established 1995).
 - Used for moneys set aside for the purchase of water through transfers or similar arrangements,
 and for the costs of filling the Eastside Reservoir Project.
- Self-Insured Retention Fund (Fund No. 1008, established 1999).
 - Used to separately hold amounts set aside for emergency repairs and claims against the District as provided in Section 5201(o).
- Lake Matthews Multi Species Reserve Trust Fund (Fund 6101, established 1997.)
 - Used as set forth in agreement between Metropolitan and the Riverside County Habitat Conservation Agency for the Multi Species Reserve.
- Other Funds to be established for bond issues, notes or other obligations of the District
 - o There shall be established in the Treasury of the District such funds and accounts as are required pursuant to bond covenants, tax and non-arbitrage certificates, bond counsel letters of instruction and related documents, to provide for accountability of District funds and compliance with applicable federal and state law and regulations. Such funds and accounts shall be established for each issue of bonds, notes or other obligations of the District as required in the respective bond or note resolution and closing documents.
- Water Stewardship Fund (Fund No. 1009 established 2005).
 - Used to collect revenue from the Water Stewardship Rate and to pay costs associated with water recycling, seawater desalination, conservation, brackish water desalination, or other demand management programs. These funds can also be used to fund administrative costs associated with these programs. Funds may be used as directed by the Board, for other lawful purposes, in accordance with Section 5201(p) and Section 5202(d).

Financial Reporting

Metropolitan prepares its financial reports in conformity with generally accepted accounting principles (GAAP). The Office of the Chief Financial Officer prepares, at the conclusion of each fiscal year, the Comprehensive Annual Financial Report (CAFR) in compliance with principles and standards for financial reporting set forth by the Governmental Accounting Standards Board (GASB).

Budgetary and Accounting Basis

The budget is developed and monitored on a modified accrual basis. This means that revenues and expenses are recognized in the period they are earned and incurred regardless of whether cash has been received or disbursed. Differences between the basis of budgeting and the financial statements are minimal. Depreciation and amortization will not be recorded and payments of debt service will be recorded when due and payable. The modified-accrual basis of accounting provides a better match of revenues and expenses for budgeting and reporting.

Financial Planning

In conjunction with the development of the Biennial Budget, Metropolitan prepares a ten year financial forecast. The ten-year plan supports long range resource, capital investment and operational planning. It includes a forecast of future costs and the revenues necessary to support operations and investments in

infrastructure and resources that are derived from the most recent Integrated Resources Plan and other planning processes.

To support Metropolitan's Biennial Budget, Ten-Year Forecast, and financial planning, revenue requirements are evaluated to determine the level of rate adjustments required for the upcoming budget year. To the extent possible, increases in rates are adjusted to avoid large fluctuations.

Financial, Administrative and Operating Policies

Metropolitan establishes policies and resolutions to comply with the stipulations set forth in the Metropolitan Water District Act and Administrative Code.

The following policies are included in the appendices as a reference:

Metropolitan Water District Administrative Code:

- §. 4301(a). Cost of Service and Revenue Requirement
- §. 4304. Apportionment of Revenues and Setting of Water Rates
- §. 5101. Investment of Surplus Funds
- §. 5107. Biennial Budget Process
- §. 5109. Capital Funding from Current Revenues
- §. 5114 (a). Reporting Requirements of the Treasurer
- §. 5200. Funds Established
- §. 5201. Restricted Funds
- §. 5202. Fund Parameters
- §. 5203. Indirect Credit of District
- §. 5204. Compliance with Fund Requirements and Bond Indenture Provisions

Metropolitan Water District Act:

- §. 61: Ordinances, Resolutions and Orders
- §. 123: Borrowing, Limitation
- §. 124: Taxes, Levy & Limitation
- §. 124.5: Ad Valorem Tax Limitation
- §. 130: General Powers to Provide Water Service
- §. 133: Fixing of Water Rates
- §. 134: Adequacy of Water Rates; Uniformity of Rates

- §. 134.5: Water Standby or Availability of Service Charge
- §. 239.2: Limitation on Amount of Revenue Bonds

Other:

- Operating policy F-01. Operating, Expensed and Capital Equipment
- Operating policy F-07. Capitalization & Retirement of Plant Assets
- Statement of Investment Policy
- §. 61. Ordinances, Resolutions and Orders grants the Board authority to make and pass ordinances, resolutions and orders.
- §. 123. Borrowing, Limitation grants authority to a district to borrow money and incur indebtedness and issue bonds with limitation.
- §. 124. Taxes, Levy & Limitation grants authority to a district to levy and collect taxes on all property within the district with limitation.
- §. 124.5. Ad Valorem Tax Limitation sets forth the restrictions of a district in levying ad valorem property tax on taxable property tax within the district.
- §. 130. General Powers to Provide Water Service sets forth the general powers of a district to provide water services.
- §. 133. Fixing of Water Rates grants the Board authority to fix water rates.
- §. 134. Adequacy of Water Rates; Uniformity of Rates sets forth the requirements of the Board in ensuring adequacy and uniformity of water rates.
- §. 134.5 Water Standby or Availability of Service Charge grants the Board authority to impose a water standby charge or availability of service charge within the district.
- §. 239.2. Limitation on Amount of Revenue Bonds sets forth limitation on amount of revenue bonds that can be issued.
- §. 4301(a). Cost of Service and Revenue Requirement sets forth the revenue requirement for fixing rates for water and that such rates and charges shall reflect the costs of the District's major service functions.
- §. 4304. Apportionment of Revenues and Setting of Water Rates sets forth the process, requirements and timeline in which the water rates and charges are ultimately adopted by the Board.
- §. 5101. Investment of Surplus Funds delegates to the Treasurer of the District the authority to invest or to reinvest funds of the District subject to the terms and conditions set forth in Section 5101.
- §. 5107. Biennial Budget Process sets forth the process, requirements and timeline in which the Biennial Budget must be submitted to and adopted by the Board.
- §. 5109. Capital Funding from Current Revenues sets forth the requirements for funding capital from current revenues.

- §. 5114(a). Reporting Requirement of the Treasurer sets forth the requirement of the Treasurer to render a Statement of Investment Policy for the following year, to be considered for approval by the Board.
- §. 5200. Funds Established sets forth the active or prospectively active funds that have been established in the Treasury of the District.
- §. 5201. Restricted Funds sets forth the conditions under which cash and securities are held in the various ledger funds.
- §. 5202. Fund Parameters sets forth the parameters for the minimum cash and securities to be held in the various ledger funds as of June 30 of each year.
- §. 5203. Indirect Credit of District gives the Chief Executive Officer authority to negotiate with the Department of Water Resources on the basis of using the indirect credit of the District to finance State Revenue Bonds.
- §. 5204. Compliance with Fund Requirements and Bond Indenture Provisions sets forth the conditions under which the Chief Executive Officer assures annual compliance with minimum fund requirements and with the provisions of the covenants for all outstanding District bond issues during the preceding fiscal year.

Operating policy F-01. Operating, Expensed and Capital Equipment governs the purchase, assignment, tracking, maintenance and retirement of operating, expensed and capital equipment.

Operating Policy F-07. Capitalization & Retirement of Plant Assets establishes the policies governing the capitalization and retirement of plant assets.

Statement of Investment Policy. Per Section 5114 of the Administrative Code, the Treasurer is required to render a Statement of Investment Policy for the following fiscal year for approval by the Board and to obtain the Board's annual delegation of authority to the Treasurer to make investments on behalf of Metropolitan.

Budget Process

The budget process provides an opportunity to align shorter-term Objectives and Actions in the department and group level business plans to Metropolitan's longer-term Mission, Values, and Strategic Priorities and the needs of our member agencies. Each even numbered year, under the direction of the General Manager, a Biennial Budget is prepared for Metropolitan operations covering the following two fiscal years. The Board does have the opportunity to amend the budget as it sees fit to changing fiscal and climatic changes.

The budget is presented to the Board for consideration and adoption in April in order to align it with the adoption of water rates also approved in April. This permits incorporation of approved O&M budget expenditures into the Revenue Requirements process, which facilitates the setting of water rates. The Board and member agencies conduct extensive reviews of and provide significant input to the budget over three months from January to April. This year's budget review process included board workshops on February 8, February 23, March 7, March 22, April 11, a public hearing on March 8, and several other presentations and caucuses with member agencies, with final approval occurring at the April 12 Board meeting.

The O&M budget is presented in an organizational format and is described in terms of its scope of work, personnel requirements, and allocation by expense category. The budget serves to identify the resource requirements for the actions and tasks each group will engage in to support the General Manager's Business Plan. The overall emphasis, consistent with Metropolitan's mission, has been on providing high quality and reliable water supplies at a fair and competitive price and in an environmental and economically responsible way.

Balanced Budget

Metropolitan considers the budget to be balanced when the sources of funds equals the uses of funds. That is, budgeted operating revenues, and on occasion the use of water rate stabilization funds, are equal to or greater than budgeted operating expenditures including debt service, and ending fund balances meet minimum policy levels. Rates and charges are set to ensure that revenues are sufficient to recover the total cash needs in a given fiscal year.

A --- --

Budget Calendar

Due Date	Activity		
July - November	Identification of major maintenance and capital projects and CIP Evaluation Team review of new and continuing projects.		
August - October	Budget instructions issued to all groups. Personnel complements are developed including full-time, part-time, temporary, and overtime estimates. Group managers begin proposed budget presentations to senior management.		
November	CIP Evaluation Team completes review of project proposals for the CIP. O&M budgets, CIP estimates, and operating equipment budgets are developed. Senior management reviews and makes final recommendations on group budgets.		
December	Group budgets are revised as necessary. Proposed budget is finalized and materials and presentations are developed for presentation to the Board of Directors.		
January-March	Proposed budget is presented to the Board of Directors and member agency managers. Proposed group and department budgets are presented to the relevant Board committees. Proposed annual budget workshops are conducted with the full Board and budget estimates are revised as necessary.		
April	Business and Finance Committee recommends action on the Biennial Budget.		

Starting in the summer, the groups identify needed major maintenance and new capital projects and develop cost estimates. In August, the budget guidelines and a calendar of budget process deadlines are issued to group, assistant group, and section managers by Budget and Financial Planning staff outlining major budget priorities consistent with the General Manager's Business Plan, staffing and operational objectives.

Board of Directors takes action on adoption of the Biennial Budget.

The development phase begins with overall program formulation and identification of individual projects, staffing, and equipment needs. Personnel budgets, including requests for temporary and part-time help, are then prepared and professional services requirements are identified. All requests for personnel, equipment purchases, and projects must be submitted with formal justifications, which address a standard set of questions developed by Budget and Financial Planning staff.

Each organization is required to identify the extent to which its proposed budget supports the General Manager's strategic priorities as outlined in the Business Plan. This information is later used to update the Business Plan in the late spring in an iterative process.

The procedures for preparation of each element of the budget are outlined below.

Labor and Professional Services Budget

The labor budget consists of regular full-time payroll, overtime, premium pay, and part-time and temporary employees. The professional services budget consists of planned payments to outside consultants for specialized skills. Personnel complements reflect the staffing of on-going work with regular employees rather than temporary employees or consultants. In addition, each group provides detailed information on consultant, overtime, and temporary employee usage. This enables senior management to examine the level and types of resources being committed to the business plan strategic priorities and make appropriate determinations for the allocation of labor resources.

Adjustments to the proposed budget are made following the review by senior management and the General Manager.

Equipment Budgets

Operating equipment is any equipment, machine, vehicle, tool, or other item that is portable, costs more than \$5,000, and has an anticipated useful life of at least five years. Expensed equipment is similar to operating equipment except that it costs less than \$5,000. All operating equipment is tracked while the tracking of expensed equipment is required for only certain classes of equipment (e.g., workstation/laptop computers, communications equipment, etc.).

The justification for equipment requests includes a description of the item, where it will be used, what it will be used for, and whether or not the item is new or a replacement. If the item is a replacement, the frequency of downtime and cost of repair of the old item versus purchasing a new one must be provided. If the item is required equipment for expanded functions or additional personnel, this must also be explained. A cost/benefit analysis is performed for equipment costing more than \$40,000.

Depending on the nature of the equipment, the requests may be evaluated by several groups. For example, each group manager and the fleet equipment coordinator review vehicle requests.

Finance Department Responsibilities

Treasury and Debt Management

- Recommend procedures for revenue collection, payment of approved demands, reporting and other
 actions associated with the prudent management of Metropolitan's financial resources.
- Provide for the issuance of debt to fund the capital improvement program.

Controller and Accounting Operations

- Prepare monthly expenditure and revenue reports.
- Prepare periodic reports on the status of expenditures, revenues, investments and actions taken to ensure the financial stability of Metropolitan.
- Prepare and present information on financial trends to facilitate evaluation of Metropolitan's financial position and identify conditions requiring management attention.

Budget and Financial Planning

• Support the development of the Strategic Plan that includes projections of short range and long range financial needs, and recommend methods for meeting those needs.

- Support the development of annual water rates and charges, Metropolitan's biennial operating and capital improvement program budget and ten year financial forecast.
- Prepare Metropolitan's proposed biennial operating budget and budget documents.
- Prepare budget performance reports on a monthly, quarterly, semi-annual and annual basis.
- Develop procedures and controls to monitor and assure compliance with the budget.
- Assist departments throughout the year with their budgets and financial issues.
- Prepare financial projections, schedules of rates and charges, tax rate proposals and other financial materials.

Other Department Responsibilities

Engineering

Prepare Metropolitan's capital improvement program budgets and CIP budget document.

General Manager Responsibilities

- Review and present to the Board of Directors long range plans, budgets and revisions, schedules of rates and charges, payments of financial demands and other financial transactions, as necessary.
- Prepare annual business plan containing General Manager's key priorities for the coming year.
- Implement emergency financial procedures within approved limits, when necessary.

Budgetary Controls

Budget requests are evaluated at several management levels. Managers and staff review budget requests during each phase of the budget process. Each request for a new project, additional personnel, or piece of operating equipment is scrutinized by each group and further reviewed by Budget and Financial Planning staff during the budget process.

All budget submittals are reviewed collectively by the group and section managers. Only those items that are deemed appropriate to support the initiatives of the General Manager's Business Plan are included in the budget recommendation.

Once the budget is completed, the expenditures for each group are monitored on a monthly basis to ensure that the groups do not exceed the authorized operating budget for the fiscal year or biennial period, unless approved by the General Manager

Budget Adjustments

The budget may be amended outside of the normal budget cycle when overall expenditures are anticipated to significantly exceed estimates. A report outlining the reasons for increasing the budget appropriation is prepared and submitted to the Board of Directors for consideration. The Board of Directors must approve any increases in the overall budget appropriations.

Capital Investment Plan (CIP)

The Capital Investment Plan (CIP) communicates the capital priorities of Metropolitan for the next two fiscal years. Within the ten year financial forecast, the CIP projects have been carefully reviewed, scored and ranked to ensure water reliability and safety while meeting all regulatory requirements.

Structure

The highest level of the CIP structure is Program. Under each CIP Program, there is one to several appropriations, each with multiple projects.

There are 12 capital programs which include:

- o System Flexibility/Supply Reliability
- o Water Quality/Oxidation Retrofit
- o Colorado River Aqueduct (CRA) Reliability
- o Treatment Plant Reliability
- o Distribution System Reliability
- o Right of Way & Infrastructure Protection
- Prestressed Concrete Cylinder Pipe Reliability
- o Regulatory Compliance
- Minor Capital Projects
- Cost Efficiency & Productivity
- System Reliability
- o Regional Recycled Water Supply Program

Definitions of the 12 capital programs can be found in the Capital Investment Plan Section of this budget book.

Preparation

The Capital Improvement Program (CIP) is prepared as part of Metropolitan's biennial budget process.

The CIP is updated to provide an overview of the financial, design, and construction status of existing projects on a quarterly basis, as well as proposals for new projects on an annual basis. All projects are reviewed and prioritized on a biennial basis by the CIP Evaluation Team.

When the need for a project is recognized, a justification is prepared which provides information regarding the expected benefits, how the work will be accomplished, the consequences of not approving the project,

alternative levels of effort and cost to accomplish the project, a discussion of the impact of the project on future O&M costs, and a cost estimate for the project.

Many of the major capital projects are developed through the planning process, which include area studies that identify capital facilities needed to meet projected water demands. New and proposed water quality regulations also have resulted in the need for major capital projects. These projects or requirements may also be identified in detailed analyses such as the System Overview Study and the Integrated Resources Plan.

Capital projects include new facilities, betterments, and replacements that cost at least \$50,000 and have an anticipated useful life of at least five years. In the case of information technology capital projects, the cost must exceed \$250,000 and the resulting asset must have an anticipated useful life of at least three years.

Projects can be further differentiated into three general categories: major capital, minor capital, and major 0&M projects. Major capital projects cost at least \$250,000 and are brought to the Board for approval prior to funding. Minor capital projects cost between \$50,000 and \$250,000 are included in the CIP and are within the General Manager's authority to approve from a Board-approved appropriation for minor capital projects. Major 0&M projects involve costs and scopes that are deemed significant and/or non-routine by the proposing organization and track expenditures in support of significant programs but do not necessarily extend the useful life of the asset. Examples of Major 0&M projects include managing quagga mussels in the aqueduct, repairing a roof, and maintaining emergency management programs.

Additional information on project budgeting can be found in the Capital Investment Plan Section of this budget book.

This page intentionally left blank.

BIENNIAL BUDGET SUMMARY

APPROPRIATIONS

The FY 2016/17 appropriation of \$1,648.7 million is comprised of \$1,200.2 million or 72.8 percent for operations expense, \$328.5 million or 19.9 percent for debt service expense, and \$120.0 million or 7.3 percent to fund Replacement and Refurbishment (R&R) expenses from operating revenues. The FY 2017/18 proposed appropriation of \$1,695.3 million is comprised of \$1,231.2 million or 72.6 percent for operations expense, \$344.1 million or 20.3 percent for debt service expense, and \$120.0 million or 7.1 percent to fund Replacement and Refurbishment expenses from operating revenues. The table below provides a comparison of FY 2016/17 and FY 2017/18 and illustrates the total proposed appropriations for the operating and capital budgets.

FY 2016/17 and 2017/18 Operating and Capital Appropriations, \$ millions

Adopted Budget	FY 2016/17	FY 2017/18	Total Biennium
Operating Budget	\$1,200.2	\$1,231.2	\$2,431.4
Debt Service	328.5	344.1	672.6
PAYGo	120.0	120.0	240.0
Grand Total	\$1,648.7	\$1,695.3	\$3,344.0

The Biennial Budget for FY 2016/17 and 2017/18 provides funding for Metropolitan's key priorities while meeting most financial policy guidelines, with overall rate increases of 4.0 percent in each year of the Biennial Budget. The overall rate increases of 4.0 percent are in line with recent increases, consistent with rate projections of 3 to 5 percent increases, and reflect the current environment of lower sales volumes due to the Governor's Executive Order to reduce statewide water use by 25 percent.

The Biennial Budget is developed and monitored on a modified accrual basis. Revenues and expenses are recognized in the period they are earned and incurred. Depreciation and amortization are not included; payment of debt service is included. The modified-accrual basis of accounting provides a better match of revenues and expenses for budgeting and reporting.

FUND SUMMARY

The following tables show fund balance, and projected revenues and expenditures for Metropolitan for each fiscal year of the Biennial Budget.

FY 2016/17 Fund Summary, \$ millions

(\$ in Millions)	All Funds	Operating Funds	Construction Funds		
Beginning of Year Balance	1,418.1	411.0	301.1	448.3	257.7
USES OF FUNDS					
Expenses	#20.0	#00.0			
State Water Contract	582.3	582.3	-	-	-
Supply Programs	78.7	78.7	-	-	-
Colorado River Power	46.6	46.6	-	-	-
Debt Service	328.5	6.5	322.0	-	-
Demand Management	75.1	75.1	-	-	-
Departmental 0&M	387.7	387.7	-	-	-
Treatment Chemicals, Sludge & Power	24.3	24.3	-	-	-
Operating Equipment	5.6	5.6	-	-	-
Sub-total Expenses	1,528.8	1,206.8	322.0	-	-
Capital Investment Plan	200.0	9.6	190.4	-	-
Fund Deposits					
R&R and General Fund	120.0	9.6	110.4	-	-
Revenue Bond Construction	9.6	-	9.6	-	-
Water Stewardship Fund	-	-	-	-	-
Exchange Agreement Set-aside	46.6	-	-	-	46.6
Treatment Surcharge Stabilization Fund	6.7	-	-	-	6.7
Interest for Construction & Trust Funds	0.3	-	0.3	-	0.0
Increase in Required Reserves	65.1	6.8	16.5	41.8	-
Increase in Rate Stabilization Fund	-	-	-	-	-
Sub-total Fund Deposits	248.4	16.4	136.9	41.8	53.3
TOTAL USES OF FUNDS	1,977.2	1,232.7	649.3	41.8	53.3
SOURCES OF FUNDS					
Revenues					
Taxes	98.3	75.1	23.3	-	-
Interest Income	13.6	5.1	3.9	4.5	0.1
Hydro Power	15.3	15.3	-	-	-
Fixed Charges (RTS & Capacity Charge)	182.3	182.3	-	-	-
Treatment Surcharge Revenue	272.9	272.9	-	-	-
Water Sales Revenue (less TS)	1,032.3	1,032.3	-	-	-
Miscellaneous Revenue	12.0	12.0	-	-	-
Bond Proceeds	89.6	-	89.6	-	-
Working Capital Borrowing	46.6	-	-	-	46.6
Sub-total Revenues	1,763.0	1,594.9	116.8	4.5	46.7
Fund Withdrawals					
Transfer Fund	-	-	-	-	-
R&R and General Fund	120.0	9.6	110.4	-	-
Bond Funds for Construction	-	-	-	-	-
Water Stewardship Fund	-	-	-	-	-
Treatment Surcharge Stabilization Fund	-	-	-	-	-
Decrease in Required Reserves	-	-	-	-	-
Decrease in Rate Stabilization Fund	94.2	-	-	94.2	-
Sub-total Fund Withdrawals	214.2	9.6	110.4	94.2	-
TOTAL SOURCES OF FUNDS	1,977.2	1,604.5	227.2	98.7	46.7
Inter-Fund Transfers	(0.0)		422.1	(56.9)	6.6
End of Year Balance	1,452.3	417.8	327.6	395.9	311.1

Totals may not foot due to rounding.
(1) includes Water Rate Stabilization Fund and Revenue Remainder Fund.
(2) includes Water Stewardship, Water Treatment Stabilization, Trust Funds and Exchange Agreement Set-aside.

FY 2017/18 Fund Summary, \$ millions

Fiscal Year Ending June 30th, 2018 (\$ in Millions)	All Funds	Operating Funds	Debt Service and Construction Funds	Reserve Funds (1)	Other Funds (2)
Beginning of Year Balance	1.452.3	417.8	327.6		311.1
USES OF FUNDS	_,		<u></u>		
Expenses					
State Water Contract	599.4	599.4	-	-	-
Supply Programs	81.7	81.7	-	-	-
Colorado River Power	54.4	54.4	-		-
Debt Service	344.1	7.1	337.0		-
Demand Management	75.9	75.9	-	-	-
Departmental O&M	388.7	388.7	-	-	-
Treatment Chemicals, Sludge & Power	24.6	24.6	-	-	-
Operating Equipment	6.4	6.4	-	-	-
Sub-total Expenses	1,575.3	1,238.3	337.0	-	-
Capital Investment Plan	200.0	5.4	194.6	-	-
Fund Deposits					
R&R and General Fund	120.0	5.4	114.6	-	-
Revenue Bond Construction	-	-	-	-	-
Water Stewardship Fund	-	-	-	-	-
Exchange Agreement Set-aside	47.4	-	-	-	47.4
Treatment Surcharge Stabilization Fund	-	-	-	-	-
Interest for Construction & Trust Funds	0.4	-	0.4	-	0.0
Increase in Required Reserves	25.4	17.9	(2.6)	10.1	-
Increase in Rate Stabilization Fund	-	-	-	-	-
Sub-total Fund Deposits	193.2	23.3	112.4	10.1	47.4
TOTAL USES OF FUNDS	1,968.5	1,267.0	644.0	10.1	47.4
SOURCES OF FUNDS					
Revenues					
Taxes	100.5	81.7	18.8	-	-
Interest Income	12.4	4.8	3.7	3.8	0.1
Hydro Power	21.6	21.6	-	-	-
Fixed Charges (RTS & Capacity Charge)	172.7	172.7	-	-	-
Treatment Surcharge Revenue	261.3	261.3	-	-	-
Water Sales Revenue (less TS)	1,114.2	1,114.2	-	-	-
Miscellaneous Revenue	12.1	12.1	-	-	-
Bond Proceeds	79.7	-	79.7	-	-
Working Capital Borrowing	47.4	-	-	-	47.4
Sub-total Revenues	1,822.0	1,668.5	102.2	3.8	47.5
Fund Withdrawals					
Transfer Fund	-	-	-	-	-
R&R and General Fund	120.0	5.4	114.6	-	-
Bond Funds for Construction	0.3	-	0.3	-	-
Water Stewardship Fund	-	-	-	-	-
Treatment Surcharge Stabilization Fund	3.2	-	-	-	3.2
Decrease in Required Reserves	-	-	-	-	-
Decrease in Rate Stabilization Fund	23.0	-	-	23.0	-
Sub-total Fund Withdrawals	146.5	5.4	114.9	23.0	3.2
TOTAL SOURCES OF FUNDS	1,968.5	1,673.9	217.1	26.8	50.7
Inter-Fund Transfers	(0.0)	(406.9)	426.8	(16.7)	(3.3)
End of Year Balance	1,499.0	435.7	325.0	383.1	355.3

Totals may not foot due to rounding.
(1) includes Water Rate Stabilization Fund and Revenue Remainder Fund.
(2) includes Water Stewardship, Water Treatment Stabilization, Trust Funds and Exchange Agreement Set-aside.

SOURCES OF FUNDS

Total Sources of FY 2016/17 and 2017/18 Funds, \$ millions

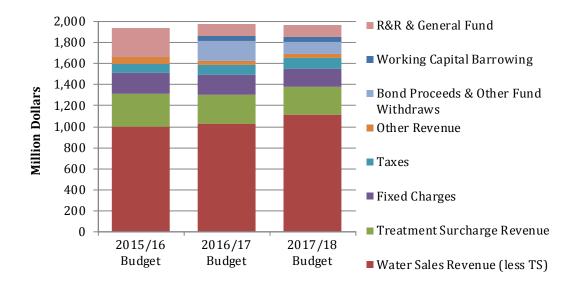
	2015/16 Budget	2016/17 Proposed	2017/18 Proposed	2016/17 Proposed Compared to 2015/16 Budget	2017/18 Proposed Compared to 2016/17 Proposed
SOURCES OF FUNDS					
Revenues					
Taxes	92.2	98.3	100.5	6.1	2.2
Interest Income	27.9	13.6	12.4	(14.4)	(1.1)
Hydro Power	18.9	15.3	21.6	(3.6)	6.4
Fixed Charges (RTS & Capacity Charge)	198.8	182.3	172.7	(16.5)	(9.6)
Treatment Surcharge Revenue	308.9	272.9	261.3	(36.0)	(11.6)
Water Sales Revenue (less TS)	999.5	1,032.3	1,114.2	32.8	81.9
Miscellaneous Revenue	11.3	12.0	12.1	0.7	0.1
Bond Proceeds and Reimbursements	-	89.6	79.7	89.6	(10.0)
Working Capital Borrowing	-	46.6	47.4	46.6	8.0
Sub-total Revenues	1,657.5	1,763.0	1,822.0	105.5	59.0
Fund Withdrawals					
R&R and General Fund	267.9	120.0	120.0	(147.9)	-
Bond Funds for Construction	-	-	0.3	-	0.3
Water Stewardship Fund	8.8	-	-	(8.8)	-
Treatment Surcharge Stabilization Fund	-	-	3.2	-	3.2
Decrease in Water Rate Stabilization Fund	-	94.2	23.0	94.2	(71.2)
Sub-total Fund Withdrawals	276.6	214.2	146.5	(62.5)	(67.7)
TOTAL SOURCES OF FUNDS	1,934.1	1,977.2	1,968.5	43.1	(8.7)

Totals may not foot due to rounding.

OPERATING REVENUE

Estimated revenues from water sales, fixed charges (Readiness-To-Serve Charge and Capacity Charge), taxes and annexation fees, and other miscellaneous income (interest income, power recovery, etc.) are projected to be \$1.63 billion for FY 2016/17 and \$1.69 billion for FY 2017/18. For FY 2016/17, this is \$30.7 million less than the FY 2015/16 budget, and for FY 2017/18, this is \$68.1 million more than FY 2016/17. The decrease in revenues for FY 2016/17 is due to decreased sales volumes. For FY 2017/18, the revenue is higher due to higher water rates and charges in calendar year 2017 and calendar year 2018. In addition, the forecast assumes the ad valorem tax rate is maintained at .0035 percent of assessed valuations. A description of each revenue source is included in the Glossary of Terms.

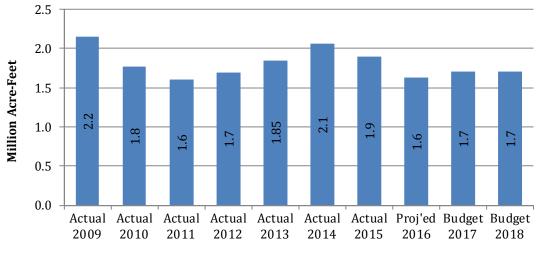
Sources of Funds FY 2016/17 and FY 2017/18, \$ millions



Water Sales

Revenues from water sales, including the Treatment Surcharge, are budgeted at \$1,305.2 million in FY 2016/17 and \$1,375.5 million in FY2017/18. Water rates and charges are to increase by 4.0 percent overall effective January 1, 2017 and 4.0 percent overall effective January 1, 2018. Water sales for FY 2016/17 are estimated to be 1.70 million acre-feet (MAF), a decrease of 50 thousand acre-fee (TAF) from the FY 2015/16 budget. Water sales for FY 2017/18 are estimated to be 1.70 MAF, unchanged from the FY 2016/17 budget. Water sales are forecasted to be lower than FY 2015/16 budget due to conservation efforts throughout the region as a result of the Governor's Executive Order calling for a statewide reduction in water use of 25 percent. Metropolitan implemented the Water Supply Allocation Plan in FY 2015/16 at a Level 3 Regional Shortage Level due to declining storage levels and a low State Water Project (SWP) allocation of 20 percent in calendar year 2015, which followed a historically low allocation in calendar year 2014 of 5 percent.

Water Sales Trend, MAF



Fiscal Year Ending

The FY 2016/17 fiscal year water sales include 1.52 MAF of firm sales and 180 TAF of exchange water sold to the San Diego County Water Authority (SDCWA) pursuant to the 2003 Amended and Restated Exchange Agreement (exchange water). Treated sales are estimated 822 TAF, or 48 percent of total sales in FY 2016/17. The FY 2017/18 fiscal year water sales include 1.501 MAF of firm sales and 195 TAF of exchange water. Treated sales are estimated at 826 TAF, or 49 percent of total sales in FY 2017/18. The figure above shows the trend of water sales.

Taxes and Annexation Fees

Revenues from taxes and annexation fees, which will be used to pay voter-approved debt service on general obligation bonds and a portion of the capital costs of the SWP, are estimated to be \$98.3 million in FY 2016/17 and \$100.5 million in FY 2017/18. The ad valorem tax rate is assumed to remain at the current level of .0035 percent of assessed value in both fiscal years; assessed valuations are projected to increase by 2.5 percent each fiscal year.

Fixed Charges

Fixed charges include the Capacity Charge and Readiness-to-Serve Charge. In FY 2016/17, these charges are estimated to generate \$38.3 million and \$144.0 million, respectively. In FY 2017/18, these charges are estimated to generate \$35.2 million and \$137.5 million, respectively. In total this represents a \$16.5 million decrease from the FY 2015/16 to FY 2016/17, and a \$9.6 million decrease from the FY 2016/17 to the FY 2017/18 budget. Fixed charges are decreasing due to the lower levels of PAYGo funded capital.

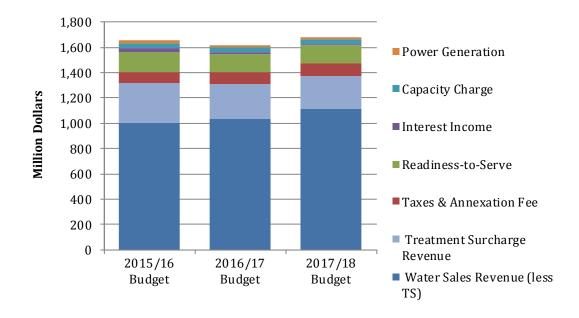
All Other Revenue

Receipts from hydroelectric power sales are estimated to be \$15.3 million for FY 2016/17 and \$21.6 million for FY 2017/18. FY 2016/17 is lower than the FY 2015/16 budgeted amount of \$18.9 million due to lower deliveries through the distribution system and a pipeline outage in Calendar Year 2016 which is impacting the generation at one of the larger plants.

Miscellaneous revenues, including interest income and lease revenues, are estimated to total \$25.6 million and \$24.6 million for FY 2016/17 and FY 2017/18 respectively (including trust accounts and construction funds), primarily due to lower assumed interest rates and lower fund balances to invest.

A summary of operating revenues is shown in the graph below.

Operating Revenues, \$ millions



CAPITAL FUNDING

The FY 2016/17 and FY 2017/18 Capital Investment Plan (CIP) will be funded with bond proceeds and current operating revenues (PAYGo). It is anticipated that Metropolitan will issue \$90 million in new revenue bonds in FY 2016/17 and \$80 million in new revenue bonds in FY 2017/18. Combined with revenue funded capital of \$120.0 million in FY 2016/17 and \$120.0 million in FY 2017/18, Metropolitan will be able to fully fund the CIP.

Please refer to the section on debt financing for additional details on debt funding of capital projects.

Capital Funding Source Descriptions

New Bond Issues

Metropolitan has the ability to issue long-term bonds to fund its capital programs. The proceeds of the bond sales can be used to pay for capital expenses over several years. The repayment of the bonds is generally over 30 years and is paid from water rate revenues.

Revenue Funded Capital

Annual capital expenses that are not paid from debt funding, grants, or loans must be paid from revenues, either from current year revenues or from the R&R fund, if funds exist.

OTHER SOURCES

Due to the SDCWA's litigation challenging Metropolitan's rates, Metropolitan currently holds \$235.5 million in its financial reserves in accordance with the 2003 Amended and Restated Exchange Agreement between Metropolitan and SDCWA (exchange agreement). This amount includes \$188.3 million associated with exchange agreement water sales from January 2011 through December 2014, \$42.2 million associated with exchange agreement water sales since January 2015, and accumulated interest on both amounts. Amounts held pursuant to the exchange agreement will continue to accumulate while the litigation, including all appeals, is pending based on the quantities of exchange agreement water that Metropolitan provides to SDCWA and the amount of charges disputed by SDCWA. In accordance with the exchange agreement, the amounts held are SDCWA's payments under the exchange agreement that are in dispute and interest earned thereon, which is based on Metropolitan's investment portfolio. The amounts held do not include the statutory prejudgment interest award or statutory post-judgment interest, neither of which the exchange agreement requires to be held.

To provide greater clarity on the amount of the exchange agreement set-aside, Metropolitan proposes to establish a designated fund to hold these amounts. The fund would be separate from Metropolitan's Water Rate Stabilization Fund and Revenue Remainder Fund and would continue to be invested with Metropolitan's short-term investments managed by the Treasurer until such time as the SDCWA v MWD litigation is resolved.

USES OF FUNDS

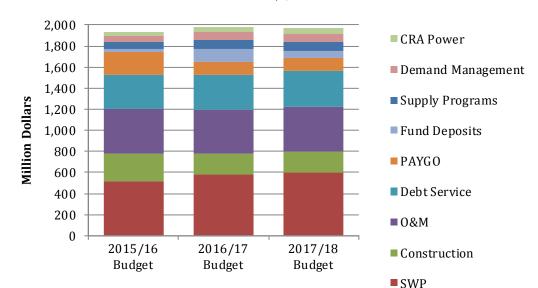
Total uses of funds are \$1.98 billion for FY 2016/17 and \$1.97 billion for FY 2017/18. The table and graph below show the breakdown of expenditures and other obligations that make up the Uses of Funds.

Total Uses of FY 2016/17 and 2017/18 Funds, \$ millions

	2015/16 Budget	2016/17 Budget*	2017/18 Budget*	2016/17 Budget Compared to 2015/16 Budget	2017/18 Budget Compared to 2016/17 Budget
USES OF FUNDS	Buuget	Duuget	Duuget	Duuget	Duuget
Expenses					
State Water Contract	515.0	582.3	599.4	67.2	17.2
Supply Programs	66.5	78.7	81.7	12.2	3.0
Colorado River Power	36.5	46.6	54.4	10.1	7.8
Debt Service	324.7	328.5	344.1	3.7	15.6
Demand Management	61.7	75.1	75.9	13.5	0.8
Departmental O&M	364.3	387.7	388.7	23.4	1.0
Treatment Chemicals, Solids & Power	27.6	24.3	24.6	(3.3)	0.3
Other O&M	26.6	5.6	6.4	(21.0)	0.8
Sub-total Expenses	1,422.9	1,528.8	1,575.3	105.9	46.5
Capital Investment Plan	267.9	200.0	200.0	(67.9)	-
Fund Deposits					
R&R and General Fund	221.0	120.0	120.0	(101.0)	-
Revenue Bond Construction	-	9.6	-	9.6	(9.6)
Water Stewardship Fund	-	-	-	-	-
Exchange Agreement Set-aside	-	46.6	47.4	46.6	8.0
Treatment Surcharge Stabilization Fund	0.4	6.7	-	6.2	(6.7)
Interest for Construction & Trust Funds	0.4	0.3	0.4	(0.1)	0.0
Increase in Required Reserves	18.2	65.1	25.4	46.9	(39.7)
Increase in Water Rate Stabilization Fund	3.3	-	-	(3.3)	-
Sub-total Fund Deposits	243.4	248.4	193.2	5.0	(55.2)
TOTAL USES OF FUNDS	1,934.1	1,977.2	1,968.5	43.1	(8.7)

Totals may not foot due to rounding.

^{*} Other O&M budget has been reassigned in Departmental Budget



Total Uses of FY 2016/17 and 2017/18 Funds, \$ millions

Colorado River Aqueduct Power

CRA power costs are projected to be \$46.6 million in FY 2016/17 and \$54.4 million in FY 2017/18 based on diversions of approximately 1.0 MAF through the CRA. FY 2017/18 is \$7.8 million higher despite similar pumping as a result of the need to purchase more supplemental energy due to expiration of the Southern California Edison Service and Interchange Agreement.

Please refer to the section on the CRA for additional details on this expense.

State Water Project

State Water Project (SWP) expenditures are budgeted at \$582.3 million for FY 2016/17 and \$599.4 million in FY 2017/18. This is based on total deliveries of 865 TAF in FY 2016/17 and 882 TAF in FY 2017/18. SWP power costs are expected to be \$164.9 million for FY 2016/17 and \$168.6 million for FY 2017/18. Power costs are lower due to favorable markets for wholesale power and natural gas, and renewable solar and wind projects.

The forecasted amount for SWP expenditures reflects incorporation of rate management credits into the forecast. Rate management credits result from a provision of the State Water Contract that provides for the reduction of capital charges based on differences between the Department of Water Resources' collections from the SWP contractors and the actual amounts paid for capital-related charges.

Please refer to the section on the SWP for additional details on this expense.

Demand Management Costs

Metropolitan provides financial incentives to its member agencies for the development of local water recycling and groundwater recovery projects through the Local Resource Program (LRP). Metropolitan also provides financial incentives for the development of conservation programs through the Conservation Credits Program (CCP). Total expenditures are budgeted at \$75.1 million for FY 2016/17 and \$75.9 million in FY 2017/18.

Please refer to the section on Demand Management for additional details on this expense.

Supply Programs

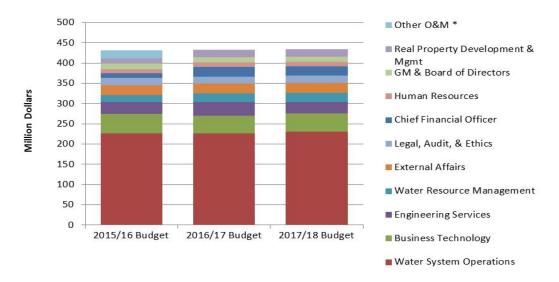
Metropolitan's two principal sources of supply draw from two different watersheds. This has allowed Metropolitan to draw more heavily on one source in the event the other is experiencing a drought. To further ensure regional supply reliability, Metropolitan has developed a portfolio of additional supply programs on both watersheds. Total expenditures are budgeted at \$78.7 million for FY 2016/17 and \$81.7 million in FY 2017/18.

Please refer to the section on the Supply Programs for additional details on this expense.

OPERATIONS AND MAINTENANCE

The FY 2016/17 O&M budget, including operating equipment purchases, is \$417.7 million. This is \$0.9 million, or 0.2 percent, lower than the FY 2015/16 budget of \$418.5 million. The FY 2017/18 O&M budget is \$419.8 million, an increase of \$2.1 million, or 0.5 percent, over the FY 2016/17 budget.

Departmental Budget by Organization (without operating equipment and overhead credit), \$ millions



^{*}Other O&M reassigned to Departmental Budget in FY 2016/17 and FY 2017/18

Operations and Maintenance Budget by Organization, \$ thousands

	2015/16	2016/17	2017/10	2015/16		2016/17	
Departmental Units	Budget Budget*		2017/18 Budget*	Budget vs. 2016/17	%	Budget* vs. 2017/18	%
	Suuget	Dunger	Duuget	Budget*		Budget*	
Office of the General Manager	\$ 13,505.5	\$ 13,276.5	\$ 13,430.9	\$ (229.0)	(1.7%)	\$ 154.4	1.2%
Water System Operations w/o Variable Treatment	198,816.1	202,239.5	206,364.4	3,423.5	1.7%	4,124.8	2.0%
Water Resource Management	17,157.9	21,583.9	22,238.7	4,426.1	25.8%	654.8	3.0%
Engineering Services	30,270.9	32,954.3	28,469.7	2,683.4	8.9%	(4,484.6)	(13.6%)
Business Technology	47,438.9	43,788.1	44,687.8	(3,650.8)	(7.7%)	899.7	2.1%
Real Property Development & Mgmt	12,969.5	17,679.3	18,027.4	4,709.8	36.3%	348.1	2.0%
Human Resources	10,038.0	10,362.2	10,221.3	324.2	3.2%	(140.9)	(1.4%)
Office of the Chief Financial Officer	11,989.4	24,327.9	23,082.3	12,338.5	102.9%	(1,245.6)	(5.1%)
External Affairs	24,252.0	23,733.0	24,335.1	(519.0)	(2.1%)	602.2	2.5%
Subtotal - General Manager's Dep.	366,438.0	389,944.8	390,857.6	23,506.7	6.4%	912.9	0.2%
General Counsel	13,228.5	13,532.2	13,777.0	303.7	2.3%	244.8	1.8%
General Auditor	3,072.0	3,084.8	3,140.8	12.8	0.4%	55.9	1.8%
Ethics Office	1,075.2	1,356.4	1,376.0	281.3	26.2%	19.6	1.4%
Overhead Credit from Construction	(19,547.7)	(20,213.4)	(20,427.4)	(665.7)	3.4%	(214.0)	1.1%
Total Departmental Budget	364,266.0	387,704.8	388,724.0	23,438.8	6.4%	1,019.2	0.3%
Other O&M							
CCP Vendor Administration	1,550.0	-	-	(1,550.0)	(100.0%)	-	NA
Performance Programs	638.3	-	-	(638.3)	(100.0%)	-	NA
Association Dues	5,184.8	-	-	(5,184.8)	(100.0%)	-	NA
Labor and Additive Adjustments	-	-	-	-	NA	-	NA
Insurance	9,800.0	-	-	(9,800.0)	(100.0%)	-	NA
Leases	600.0	-	-	(600.0)	(100.0%)	-	NA
Property Taxes	636.7	-	-	(636.7)	(100.0%)	-	NA
Subtotal - Other	18,409.8	-	-	(18,409.8)	(100.0%)	-	NA
TOTAL OPERATIONS & MAINTENANCE	382,675.8	387,704.8	388,724.0	5,029.1	1.3%	1,019.2	0.3%
Operating Equipment	8,190.3	5,623.4	6,426.0	(2,566.9)	(31.3%)	802.6	14.3%
Variable Treatment	27,644.2	24,330.3	24,610.2	(3,313.9)	(12.0%)	279.9	1.2%
GRAND TOTAL	\$ 418,510.3	\$ 417,658.5	\$ 419,760.2	\$ (851.8)	(0.2%)	\$ 2,101.7	0.5%

Totals may not foot due to rounding

^{*} Other O&M budget has been reassigned in Departmental Budget

The graph above depicts the distribution of the departmental 0&M by organization without other 0&M, the overhead credit, and operating equipment. Including treatment costs, the Water System Operations (WSO) group accounts for 58 percent and 59 percent, respectively, of the total departmental budget for FY 2016/17 and FY 2017/18. Business Technology, which incorporates Administrative Services and Information Technology, is the second largest departmental expenditure area, accounting for 11 percent of the total departmental budget for FY 2016/17 and FY 2017/18. A summary of the 0&M budget by organization is shown in the table above. Given the forecast of lower water sales over the next two fiscal years, 0&M budgets were reviewed and reduced. The table below summarizes the 0&M budget by expenditure type. A more detailed discussion of significant factors impacting the 0&M budget follows.

2016/17 and 2017/18 Operations & Maintenance Annual Budget by Expenditure Type, \$ thousands

				2015/16 Budget vs.	2016/17 Budget vs.
	2015/16 Budget	2016/17 Budget	2017/18 Budget	2016/17 Budget	2017/18 Budget
Salaries & Benefits (1)	267,424.3	266,809.2	273,061.3	(615.1)	6,252.1
Chemicals, Solids, and Power (2)	27,644.2	24,330.3	24,610.2	(3,313.9)	279.9
Outside Services	43,777.4	42,476.6	38,785.0	(1,300.8)	(3,691.6)
Materials & Supplies (3)	25,783.3	25,987.0	25,387.2	203.7	(599.8)
Other	45,690.8	52,432.0	51,490.6	6,741.3	(941.5)
Operating Equipment	8,190.3	5,623.4	6,426.0	(2,566.9)	802.6
Total	418,510.3	417,658.5	419,760.2	(851.8)	2,101.7

Totals may not foot due to rounding

- (1) Includes overhead credit for construction and savings from liability reduction
- (2) Costs associated with treatment only.
- (3) Without chemicals associated with treatment plants.

FY 2016/17 O&M Budget

The FY 2016/17 O&M budget includes \$417.7 million for labor and benefits, water treatment chemicals, power, and solids handling, materials and supplies, professional services, and operating equipment purchases. This is \$0.9 million, or 0.2 percent, lower than the FY 2015/16 budget of \$418.5 million due primarily to an effort to control labor costs and equipment expenditures in an environment of lower water sales. Variable treatment costs are also lower due to less treated water sales.

Salaries and Benefits: Labor costs, not including those charged to construction are \$266.8 million. This is \$0.6 million, or 0.2 percent, lower than the FY 2015/16 budget of \$267.4 million. This decrease is primarily the result of an effort to control costs by unfunding positions or planning to leave positions vacant for some period during the fiscal year. Labor costs reflect negotiated labor increases and increases in retirement, medical and dental premiums.

The total authorized personnel complement for the FY 2016/17 budget is 1,912 authorized positions, including 26 agency and district temporary full-time equivalents (FTEs), and reflects an increase of 1 net full-time position from the FY 2015/16 budget. Incorporating unfunded positions and positions that are planned to be vacant for portions of the year, the total funded positions are 1,840 FTEs.

Other O&M – Chemicals, solids, and power reflect the cost of the water treatment process and are anticipated to decrease by \$3.3 million in FY 2016/17, driven by a decrease in treated water sales. Operating equipment is budgeted \$2.5 million lower to minimize replacement of equipment. Other O&M is higher primarily due to increased property tax expenditures associated with the PVID land purchase.

FY 2017/18 O&M Budget

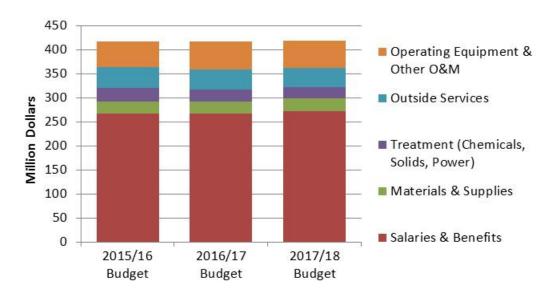
The FY 2017/18 O&M budget is \$419.8 million, an increase of \$2.1 million, or 0.5 percent, compared to the FY 2016/17 budget. This increase is primarily due to merit increases for qualified employees, an increase in labor additive costs, and slight increase in chemical and power costs to operate the treatment plants due to slightly higher treated water sales.

Salaries and Benefits -The FY 2017/18 0&M labor budget is about \$6.3 million or 2.3% higher than the FY 2016/17 budget. Labor and Additives were calculated to allow for salaries and benefits to increase at the inflation rate of 2.25 percent overall.

The total authorized personnel complement for FY 2017/18 is reduced by 2 FTEs to 1,910 positions, due to a decrease in temporary labor. Incorporating unfunded positions and positions that are planned to be vacant for portions of the year, the total funded positions are 1,841 FTEs.

Other O&M –The cost of chemicals, power, and sludge disposal incurred in the water treatment process is anticipated to increase slightly by \$0.7 million in FY 2017/18 due primarily to higher treated water sales.

Departmental Budget by Expenditure Type, \$ millions



The figure above summarizes the total departmental 0&M budget by expenditure type, of which about 65 percent is for salaries and benefits in both FY 2016/17 and 2017/18.

STAFFING PLAN

Total authorized positions (including temporary workers) for FY 2016/17 and FY 2017/18 are 1,912 and 1,910 positions respectively. Total 0&M personnel are up by 4 district temporary positions (rounded) to 1,912 in 2016/17 and decrease 2 regular full time positions to a total of 1,910 in FY 2017/18. Positions dedicated to capital work are expected to increase slightly during the biennium while positions dedicated to 0&M will decrease slightly. The FY 2016/17 and FY 2017/18 budget includes unfunded positions and positions that are planned to be vacant for portions of the year in order to manage 0&M labor costs. Therefore, funded positions are lower than the authorized complement. The personnel complement is shown in the following tables.

Regular and Temporary Positions

	2014/15 Budget	2015/16 Budget	2016/17 Budget	2017/18 Budget	2015/16 Budget vs. 2016/17 Budget	2016/17 Budget vs. 2017/18 Budget
Regular Full Time Positions	1,886	1,885	1,886	1,886	1	0
District Temporary Positions	20	20	22	20	2	-2
Agency Temporary Positions	-	-	4	4	4	0
Total	1,906	1,905	1,912	1,910	7	-2

Totals may not foot due to rounding.

O&M and Capital Staffing Levels

	2015/16 Budget	2016/17 Budget	2017/18 Budget
O&M Positions			
Regular Full Time Positions	1,604	1,600	1,592
District & Agency Temporary Positions	20	24	23
Total O&M	1,624	1,624	1,615
Capital Positions			
Regular Full Time Positions	281	286	294
District & Agency Temporary Positions	-	2	1
Total Capital	281	288	295
GRAND TOTAL	1,905	1,912	1,910

Totals may not foot due to rounding.

CAPITAL INVESTMENT PLAN

The CIP budget for FY 2016/17 and FY 2017/18 is forecasted at \$200.0 million in both fiscal years. It is anticipated to be funded by current operating revenues (i.e., budgeted PAYGo) and by issuing new revenue bonds. The FY 2016/17 capital budget is \$68 million lower than the FY 2015/16 budget.

The two largest areas of expenditures in the FY 2016/17 and FY 2017/18 CIP are Infrastructure Reliability and Water Quality. It is currently anticipated that infrastructure expenditures will continue to grow as more facilities reach the end of their service life and require rehabilitation and refurbishment.

The CIP is discussed in more detail in the CIP supplemental volume.

Cash Funded Capital

Overall, the CIP is anticipated to be funded 60 percent by current operating revenues (budgeted PAYGo). The PAYGO funding for FY 2016/17 and FY 2017/18 is budgeted at \$120 million in each fiscal year.

Debt Funded Capital

Overall, the CIP is anticipated to be funded 40 percent by revenue bond proceeds. New debt issues are planned in FY 2016/17 in the amount of \$90 million, and in FY 2017/18 in the amount of \$80 million. Given construction funds expected to be available at the beginning of the biennial budget period and planned PAYGo amounts, these bond issues should provide sufficient funds to meet CIP expenditures over the two years.

Debt Service

For FY 2016/17 and FY 2017/18, Metropolitan plans to issue new revenue bond debt as described above. Debt service payments in FY 2016/17 are budgeted at \$328.5 million and \$344.1 million in FY 2017/18.

Please refer to the section on Capital Financing for additional details on this expense.

FUND BALANCES AND RESERVES

Metropolitan operates as a single enterprise fund for financial statements and budgeting purposes. Through its administrative code, Metropolitan identifies a number of accounts, which are referred to as funds, to separately track uses of monies for specific purposes as summarized in the table below.

The FY 2016/17 budget forecasts a \$52.4 million decrease in reserves by June 30, 2017 and includes the Water Rate Stabilization Fund (WRSF) and the Revenue Remainder Fund. In addition, required reserves and increases to the Treatment Surcharge Stabilization Fund (TSSF) and the Water Stewardship Fund (WSF) are projected to increase by \$30.0 million.

The FY 2017/18 budget forecasts a \$12.9 million decrease in reserves by June 30, 2018 and includes the WRSF and the Revenue Remainder Fund. In addition, required reserves and changes to the TSSF and WSF are expected to increase by a net of \$12.1 million.

Fund balances are budgeted to be \$1.45 billion at June 30, 2017. Of that total, \$746 million is restricted by bond covenants, contracts, or board policy, and \$706 million is unrestricted. Fund balances are budgeted to be \$1.50 billion at June 30, 2018. Of that total, \$762 million is restricted by bond covenants, contracts, or board policy, and \$737 million is unrestricted.

On June 30, 2017, the targets for the minimum and target reserve funds are estimated to be \$247.2 million and \$600.6 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the WRSF and Revenue Remainder Fund will total about \$395.9 million, about \$148.7 million over the minimum level.

On June 30, 2018, the targets for the minimum and target reserve funds are estimated to be \$257.3 million and \$626.9 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the WRSF and Revenue Remainder Fund will total about \$383.1 million, about \$125.8 million over the minimum level.

Included in the designated trust funds is the exchange agreement set-aside amounts discussed previously.

Projected Fund Balances, \$ millions

	Restri	icted	Unres	Unrestricted		
	Contractual	Board	Designated	Undesignated	Total	
2016/17 Budget						
Operating Funds	205.3	103.5	0.0	0.0	308.8	
Debt Service Funds	296.6	0.0	0.0	0.0	296.6	
Construction Funds	31.0	0.0	0.0	0.0	31.0	
Reserve Funds (1)	0.0	0.0	0.0	395.9	395.9	
Rate Stabilization Funds (2)	0.0	0.0	6.7	0.0	6.7	
Trust and Other Funds (3)	109.9	0.0	303.5	0.0	413.4	
Total June 30, 2017	642.8	103.5	310.2	395.9	1,452.3	
2017/18 Budget						
Operating Funds	217.5	109.2	0.0	0.0	326.7	
Debt Service Funds	293.5	0.0	0.0	0.0	293.5	
Construction Funds	31.5	0.0	0.0	0.0	31.5	
Reserve Funds (1)	0.0	0.0	0.0	383.1	383.1	
Rate Stabilization Funds (2)	0.0	0.0	3.4	0.0	3.4	
Trust and Other Funds (3)	109.9	0.0	350.9	0.0	460.8	
Total June 30, 2018	652.4	109.2	354.3	383.1	1,499.0	

Total June 30, 2018 652.4 109.2 354.3 383.1

Totals may not foot due to rounding.
(1) includes Water Rate Stabilization Fund and Revenue Remainder Fund, and working capital borrowings in an amount equal to the exchange agreement set-aside

⁽²⁾ includes Water Stewardship Fund and Treatment Surcharge Stabilization Fund

⁽³⁾ includes exchange agreement set-aside

This page intentionally left blank.

RATE STRUCTURE OVERVIEW

Framework

The Rate Structure Framework evolved through a comprehensive strategic planning process initiated in 1998. As depicted in the following figure, the first step of the process was to identify the "Major Requirements of Metropolitan's Mission," which was reflected in the Strategic Plan Policy Principles. The Statement of Common Interests formed the basis of Metropolitan's strategic plan to address these mission requirements. One of the most important common interests was "Cost Allocation and Rate Structure." In determining the most appropriate cost-of-service (COS) and rate structure, a set of pricing objectives, or guiding rate principles, was developed. These guiding rate principles defined Metropolitan's Rate Structure Framework by which various COS and rate-setting methodologies could be evaluated.

Development of the Rate Structure Framework

Major Requirements of Metropolitan's Mission

Statement of Common Interest

Rate Structure Framework

- Flexibility
- Certainty
- Public Stewardship
- Regional Provider
- Financial Integrity
- Local Resource Development
- Imported Water Services
- Choice and Competition
- Responsibility for Water Quality
- Cost Allocation and Rate Structure

- Fair
- Based on the stability of MWD's revenue and coverage of its costs
- Provide certainty and predictability
- Not place any class of customers at significant economic disadvantage
- Reasonably simple and easy to understand
- Any dry-year allocation should be based on need

The strategic planning process which established the foundation of the Rate Structure Framework is discussed below.

Major Requirements of Metropolitan's Mission

As one of the first steps in the strategic planning process in 1998, the Board developed a list of three mission requirements in its Metropolitan vision statement – flexibility, certainty, and public stewardship:

- Flexibility. Metropolitan is aware of the legislative and economic pressures which make flexibility in providing water services for a changing demand and in a competitive water market paramount. Fair compensation for wheeling through Metropolitan's conveyance systems is an essential element of Southern California's developing market.
- **Certainty.** The certainty that Metropolitan's water supply is reliable and that the COS is appropriate is of utmost importance to member agencies and their retailers who are endeavoring to provide not only water, but value to the residents in their service area.
- **Public Stewardship.** As public stewards of much of Southern California's water supply, Metropolitan and its member agencies are responsible for making certain that the water is provided in a cost-effective and environmentally sound manner.

Statement of Common Interests

From the strategic planning mission requirements, the Board developed a list of seven areas of common interest that formed the major focus elements of the Metropolitan strategic plan:

- Regional provider. This area includes the concerns of protecting regional infrastructure and providing
 service during drought periods. Regional water must be provided to meet the needs of the member
 agencies, and water supplies must be equitably allocated during drought periods based on the Water
 Surplus and Drought Management Plan principles.
- **Financial integrity.** It is a common interest of the members for Metropolitan to assure the financial integrity of the agency in all aspects of its operations.
- Local resource development. Metropolitan supports local resources development by working in
 partnership with its member agencies and by providing member agencies with financial incentives for
 water conservation and for local projects.
- **Imported water service**. Metropolitan is responsible for providing imported water to meet the committed needs of its member agencies.
- Choice and competition. After Metropolitan provides imported water for the member agencies'
 committed demands, a member agency can choose the most cost-effective additional water supplies for
 its customers. These choices include either Metropolitan, local resource development, market transfers,
 or some combination of these secondary options. Metropolitan and its member agencies can decide how
 to provide these additional supplies collaboratively while balancing local, imported, and market
 opportunities with affordability.
- Responsibility for water quality. Metropolitan must advocate source water quality and implement inbasin water quality for the imported water it supplies. This is necessary to guarantee compliance with primary drinking water standards and to meet the water quality requirements for water recycling and ground water replenishment.
- Cost allocation and rate structure. The framework for a revised rate structure will be established to
 address allocation of costs, financial commitment, unbundling of services, and fair compensation for
 services including wheeling, peaking, growth, and others.

Rate Structure Framework

A major element of common interest was "Cost Allocation and Rate Structure." In addressing this element a set of pricing objectives, or guiding rate principles, had to be developed to evaluate alternative COS and rate setting approaches, or methodologies. As a result, the Board adopted a set of rate principles which was defined as the Rate Structure Framework. The Rate Structure Framework provided the principles for the Strategic Planning Steering Committee to develop a preferred rate structure. The Rate Structure Framework includes the following principles:

The rate structure should be fair;

It should be based on the stability of Metropolitan's revenue and coverage of its costs;

- It should provide certainty and predictability;
- It should not place any class of customers at *significant economic disadvantage*;
- It should be reasonably simple and easy to understand; and
- Any dry-year allocation should be *based on need*.

The 2001 COS and rate structure was adopted by the Board to address the Rate Structure Framework.

RATE STRUCTURE DESIGN

The elements of the rate structure, and the rates and charges for calendar year 2016, 2017, and 2018 are summarized in Table 14.

Table 14. Rate Elements

Rate Design Elements	Functional Costs Recovered	Type of Charge	2016 *	2017 *	2018 *
Tier 1 Supply Rate	Supply	Volumetric (\$/af)	\$156	\$201	\$209
Tier 2 Supply Rate	Supply	Volumetric (\$/af)	\$290	\$295	\$295
System Access Rate	Conveyance/Distribution (Average Capacity)	Volumetric (\$/af)	\$259	\$289	\$299
Water Stewardship Rate	Demand Management	Volumetric (\$/af)	\$41	\$52	\$55
System Power Rate	Power	Volumetric (\$/af)	\$138	\$124	\$132
Treatment Surcharge	Treatment	Volumetric (\$/af)	\$348	\$313	\$320
Capacity Charge	Peak Distribution Capacity	Fixed (\$/cfs)	\$10,900	\$8,000	\$8,700
Readiness-to-Serve Charge	Conv./Distr./Emergency Storage (Standby Capacity)	Fixed (\$M)	\$153	\$135	\$140

^{*}Rates and Charges effective January 1st

Supply Rates

Purpose

The rate structure recovers supply costs through a two-tiered price structure. The amount of water a member agency may purchase at the lower Tier 1 Supply Rate, water sales within a member agency's Tier 1 maximum, is established by either a purchase order agreement or calculated as 60 percent of its Revised Base Firm Demand.

Tier 1 Supply Rate

The Tier 1 Supply Rate is a volumetric rate charged on Metropolitan water sales that are within a member agency's Tier 1 maximum. The Tier 1 Supply Rate supports a regional approach through the uniform, postage stamp rate. The Tier 1 Supply Rate is calculated as the amount of the total supply revenue requirement that is not recovered by the Tier 2 Supply Rate divided by the estimated amount of Tier 1 water sales.

Tier 2 Supply Rate

The Tier 2 Supply Rate is a volumetric rate that reflects Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate is charged on Metropolitan water sales that exceed a member agency's Tier 1 maximum. The Tier 2 Supply Rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and conservation.

Implementation

Because the Tier 1 maximum is set at a total member agency level and not at a meter level, all system water delivered will be billed at the Tier 1 Supply Rate. Any water delivered that exceeds the Tier 1 maximum will be billed an additional amount equivalent to the difference between the Tier 2 and Tier 1 Supply Rates.

For member agencies without purchase orders and member agencies with purchase orders that accrue a cumulative Tier 2 obligation at the end of year five of the purchase order, the Tier 2 Supply Rate will be applied in the month where the Tier 1 maximum is surpassed on all applicable deliveries. 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.

Benefits

The use of the two-tiered structure for Supply Rates provides several benefits including (1) efficient resource management, and (2) clear price signals to accommodate a water transfer market.

System Access Rate (SAR)

Purpose

The SAR recovers the cost of the Conveyance and Distribution System that is used on an average annual basis through a uniform, volumetric rate. All users (member agencies and third parties) pay the SAR for access to conveyance and distribution capacity in the Metropolitan system.

Implementation

The SAR is charged for each acre-foot of water transported by Metropolitan, regardless of the ownership of the water being transported. All users (member agencies and third-party wheelers) using the Metropolitan

system to transport water pay the same SAR for the use of the system conveyance and distribution capacity used to meet average annual demands.

Benefits

There are several benefits to the SAR, including (1) support of a regional approach, (2) accommodates a water transfer market that does not unfairly advantage one user over another, (3) provides a clear linkage between costs and benefits, and (4) establishes a simple approach to recovering the costs of conveyance service.

Water Stewardship Rate (WSR)

Purpose

The WSR provides a dedicated source of funding for conservation and local resources development through a uniform, volumetric rate. The WSR supports past and future conservation and local resources projects. Because of the uniform benefits conferred on all system users by investments in conservation and local resources, all users of Metropolitan's conveyance and distribution system pay the WSR.

Implementation

The WSR is charged to each acre-foot of water delivered by Metropolitan, regardless of the water being transported. All users (member agencies and third-party wheelers) benefit from the system capacity made available by investments in Demand Management Programs like Metropolitan's Conservation Credits Program and Local Resources Program. Therefore, all users pay the WSR.

Benefits

The WSR provides significant benefits including (1) support of a regional approach, and (2) providing a dedicated source of funding for the development of local resources.

System Power Rate (SPR)

Purpose

The SPR recovers the costs of energy required to pump water to Southern California through the SWP and CRA. The cost of power is recovered through a uniform, volumetric rate.

Implementation

The SPR is applied to all deliveries of Metropolitan water to member agencies. Wheeling parties pay for actual cost (not system average) of power needed to move the water. Member agencies engaging in wheeling transaction of up to one year pay the wheeling rate (consisting of the actual cost of power, SAR, WSR, and an administrative fee). Other wheeling transactions are pursuant to individual contracts. For example, a party wheeling water through the California Aqueduct would pay the variable power cost associated with using the SWP transportation facilities.

Benefits

The primary benefit of the SPR is that it clearly identifies Metropolitan's average cost of power.

Treatment Surcharge

Purpose

The Treatment Surcharge recovers all of the costs of providing treatment capacity and operations through a uniform, volumetric rate per acre-foot of treated water sales.

Implementation

The Treatment Surcharge is charged to all treated water sales.

Benefits

There are several benefits provided by the treatment surcharge, including that (1) only treated water users pay for the costs of treatment, and (2) by averaging the costs of providing treated water service over the entire system the regional economies of scale are preserved.

Capacity Charge

Purpose

The Capacity Charge provides a price signal to encourage agencies to reduce peak demands on the Distribution System and to shift demands that occur during the May 1 through September 30 period into the October 1 through April 30 period, resulting in more efficient utilization of Metropolitan's existing infrastructure and deferring capacity expansion costs.

Implementation

• Each member agency will pay the Capacity Charge per cubic feet per second (cfs) based on a threeyear trailing maximum peak day demand. Each member agency's peak day is likely to occur on different days; therefore this measure approximates peak week demands on Metropolitan.

Benefits

The Capacity Charge provides several benefits including (1) increasing the overall efficiency of water use, (2) improving the fair allocation of costs among member agencies based upon the demand imposed by each agency, and (3) providing a source of fixed revenue.

Readiness-To-Serve Charge (RTS)

Purpose

The RTS recovers the cost of the portion of system that is available to provide emergency service and available capacity during outages and hydrologic variability.

Implementation

The RTS is a fixed charge that is allocated among the member agencies based on a ten-fiscal-year rolling average of firm demands. Water transfers and exchanges are included for purposes of calculating the ten-year rolling average. The Standby Charge will continue to be collected at the request of the member agency and applied as a direct offset to the member agency's RTS obligation.

Benefits

The RTS provides two major benefits, which includes (1) a better matching of costs and benefits, and (2) a SAR that recovers only those costs associated with providing average annual service.

Purchase Order for System Water

Purchase Orders were developed to establish a financial commitment from the member agency to Metropolitan in exchange for the ability to purchase more water at the lower Tier 1 Supply Rate. In November 2014, the Metropolitan Board approved new Purchase Orders effective January 1, 2015 through December 31, 2024. Twenty-one of the twenty-six member agencies have Purchase Orders, which commit the member agencies to purchase a minimum amount of supply from Metropolitan (the Purchase Order Commitment) over a ten-year period.

There is no annual minimum or maximum purchase commitment required by the Purchase Order. A member agency has the full ten-year term to fulfill the Purchase Order Commitment. In exchange for this commitment, the member agency can purchase an amount of firm water supply equal to 90 percent of its cumulative Base Period Demand over the full ten years at the lower Tier 1 Supply Rate. An agency that determined that a Purchase Order is not in its best interest may purchase up to 60 percent of its Revised Base Firm Demand annually at the lower Tier 1 Supply Rate. The terms and conditions of the Purchase Order are uniform for all member agencies.

The Base Period Demand was established for each member agency. Member agencies chose a base amount of (1) the member agency's Revised Base Firm Demand which is the 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.

At the end of the Purchase Order Term, if the member agency has not purchased enough firm supply to meet its Purchase Order Commitment, it will be billed for the remaining balance of the Purchase Order Commitment at the average of the Tier 1 Supply Rate in effect during the Term. This payment may be prorated with interest evenly over the next 12 invoices.

If a member agency fulfills its Purchase Order Commitment prior to the end of the Purchase Order Term, (e.g. purchased ten times 60 percent of the Initial Base Period Demand) then the member agency has met its obligation under the Purchase Order. The member agency may continue to purchase up to 90 percent of its cumulative Base Period Demand over the Term at the Tier 1 Supply Rate for the duration of the Purchase Order Term.

Although the maximum amount of water that can be purchased at the Tier 1 Supply Rate may increase over time if the agency's Base Period Demand increases, the Purchase Order Commitment is fixed for the entire Purchase Order Term and does not increase.

This page intentionally left blank.

UNDERSTANDING THE LAYOUT OF THE DEPARTMENTAL BUDGET

DEPARTMENTAL/GROUP BUDGET

The Departmental Section provides detailed information about the Operations and Maintenance (O&M) budget of each group and department and consists of the following:

Mission

Describes, at a high level, the scope of the organization's functions.

Programs

Describes the organizations roles and responsibilities by program or section and provides a summary organizational chart.

Goals & Objectives

Summarizes the objectives each organization proposes to accomplish in the upcoming fiscal years.

O&M Financial Summary

Provides a summary of the organization's 0&M budgets. For FY 2016/17 and FY 2017/18, 0&M expenditures are identified by expense categories such as salaries and benefits, professional services, and "other" expenditures and incorporate the group objectives.

Expense Category

Category	Description
Salaries and Benefits	Labor costs and fringe benefits for Metropolitan's regular, district temporary, and agency temporary employees. Total salaries and benefits, direct charges to capital, and O&M salaries are shown.
Professional Services	All costs associated with work performed by outside contractors and consultants.
Operating Equipment	Costs associated with the purchase of capitalized portable equipment, including automobiles, trucks, servers, and other applicable portable equipment.
Other	Cost of purchasing chemicals, materials and supplies, reprographics, travel, telephone, and other necessary items for effective operation of Metropolitan. A breakdown has been provided to itemize those expense categories that are five percent or more of the "other" category.

O&M Budget by Section

Provides a summary of the organization's O&M budget and personnel count by section or program.

Personnel Summary

Provides a breakdown for the organization of total personnel involved in O&M and capital work

Budget Highlights

Identifies the major factors of the budget variance over the biennium as well as any significant changes by budget year.

OFFICE OF THE GENERAL MANAGER

The Office of the General Manager manages and administers all Metropolitan activities except those functions specifically delegated by statutes and Board order to the General Counsel, General Auditor, or Ethics Officer.

PROGRAMS

The Office of the General Manager provides overall leadership and management of Metropolitan's mission. This includes the management of all matters pertaining to the business of the Board and research on actions and policies of the Board by staff for directors, member agencies, and the public.

The General Manager's Business Plan outlines the strategic priorities that this office and Metropolitan will focus on for the period covered by the Biennial Budget.

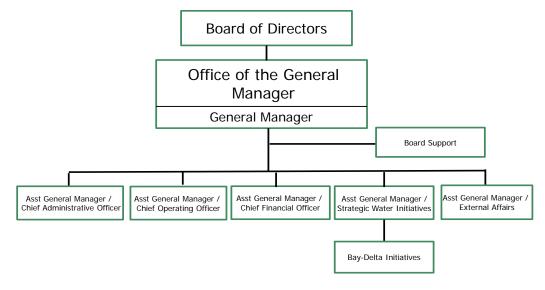
The Office of the General Manager accomplishes its mission through the following programs or sections:

Office of the General Manager is responsible for the management and administration of Metropolitan's activities including the

management of all matters pertaining to the business of the Board and research on actions and policies of the Board by staff for directors, member agencies, and the public.

Bay-Delta Initiatives organization was created in recognition of the increased importance of the Bay Delta to Southern California's long-term reliability goals and opportunities available to advance the long-term needs of the Bay Delta. This organization spearheads efforts necessary to ensure a stable water supply from key sources in an environmentally responsible manner.

Board of Directors provides policy and direction as the governing body of the Metropolitan Water District. The Board Support Team provides administrative support to the business of the Board.



GOALS AND OBJECTIVES

For FY 2016/17 and FY 2017/18, the General Manager's Business Plan outlines five strategic priorities to support Metropolitan's mission.

Strategic Priority #1: Complete the Bay Delta Conservation Plan/California WaterFix (BDCP/CA WaterFix) Environmental Impact Report/Statement

During FY 2016/17, the goal will be to complete the environmental documentation and necessary financing agreements so that Metropolitan's Board of Directors can make a sound business decision on participation in and implementation of the BDCP/CA WaterFix.

Interim steps in this process that will be completed during this time period include organizing and developing procedures and structures to handle the mechanics and logistics of managing a mega-construction project, including but not limited to: establishing and staffing a construction office; developing appropriate specifications for equipment procurement, design and construction; establishing procedures for land acquisition and habitat development; creating approaches for interim and long-term project financing; and preparing all necessary permitting documentation.

In addition, staff will continue near-term efforts to provide greater reliability of State Water Project (SWP) supplies. These actions include identifying and pursuing early-action habitat projects that satisfy current permit obligations and will also be compatible with the BDCP/CA WaterFix. Staff will also pursue implementation of new management techniques for species in the Delta including development of new models for species life cycles, turbidity monitoring and other approaches all designed to lead to better management of water supplies while enhancing protection for endangered species.

Finally, staff will continue implementation of the Delta Flood Emergency Preparedness, Response Recovery Plan in the event of a catastrophic interruption of water supplies due to earthquake or flood damage.

Strategic Priority #2: Develop Water Supplies and Manage Water Reserves

Staff will work closely with the Board to manage Metropolitan's water supply reserves in the face of unprecedented drought conditions in California and throughout the Southwest. Should El Niño conditions create more supply, staff is prepared to maximize storage opportunities. On the other hand, should supply conditions not improve then actions will include implementation of storage withdrawals, coordination of deliveries with the member agencies, close monitoring of drought conditions and possible allocation actions as part of the Water Surplus and Drought Management (WSDM) plan, and targeted outreach on conservation efforts. The past year's successful implementation of the Water Supply Allocation Plan (WSAP) will be reviewed and a determination will be made on what actions to take for FY 2016/17.

Strategic Priority #3: Embark on Strategic Review of Metropolitan's Mission and Programs

Periodically the Board has reviewed its policies and mission to ensure they fit with the times. Many significant policy issues have arisen from the historic drought conditions and were discussed in the 2015 Integrated Resources Plan (IRP) update. FY 2016/17 presents an opportune time for Metropolitan to review its policies and determine if changes or refinements should be made as critical decisions are made on broader California water policy matters.

Strategic Priority #4: Educate the Public and Stakeholders on Critical Water Supply Conditions and Critical Water Management Decisions.

The coming two years represent a major crossroad for California water. The drought that gripped California has caused unprecedented water conditions for much of California and led to a dramatic response at the state and federal level. The impact from these conditions are likely to continue through 2017 and beyond. Additionally,

key decisions will occur on a Bay Delta plan, significant legislative proposals for statewide action and key Colorado River milestones. It will be essential to fully engage the public and key stakeholders in Metropolitan's service area and statewide on the importance of these issues, as decisions made over the next two years will impact California water for decades to come.

Strategic Priority #5: Employee Development

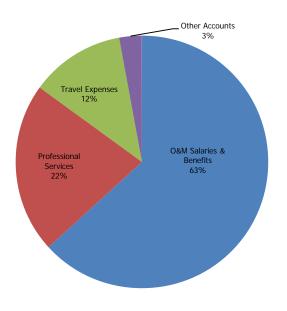
The Biennial Budget calls for Metropolitan to cease its managed attrition that has shrunk Metropolitan from 2,400 full-time employee positions to a current workforce of approximately 1,770. Recruitment activity will be expanded to keep place with retirements and fund the work force at approximately 1,840 positions over the next two years. Increased employee crosstraining and employee development efforts will be needed to meet the challenge of retirements brought about by a reduced workforce.

O&M FINANCIAL SUMMARY

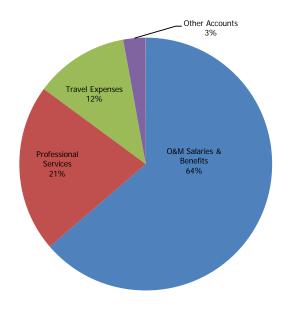
	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	8,358,900	9,118,400	8,977,000	(141,400)	9,169,600	192,600
Direct Charges to Capital	_	_	_	_	_	_
O&M Salaries and Benefits	8,358,900	9,118,400	8,977,000	(141,400)	9,169,600	192,600
% Change		9.1%		(1.6%)		2.1%
Professional Services	4,171,100	3,666,100	3,391,700	(274,400)	3,353,600	(38,100)
Conferences & Meetings	85,300	20,500	107,100	86,600	108,400	1,300
Subsidies & Incentives	49,600	57,900	60,600	2,700	60,600	_
Travel Expenses	519,000	483,100	572,800	89,700	571,900	(900)
Other Accounts	228,600	159,400	167,300	7,900	166,800	(500)
Total O&M	13,412,500	13,505,400	13,276,500	(222,900)	13,430,900	154,500
% Change		0.7%		(1.7%)		1.2%

Note – Totals may not foot due to rounding.

FY 2016/17 BUDGET BY EXPENDITURE

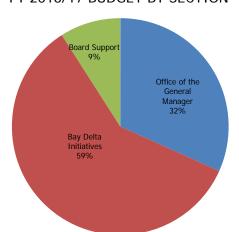


FY 2017/18 BUDGET BY EXPENDITURE

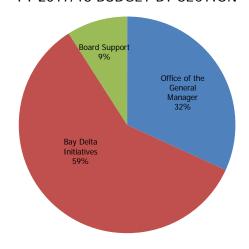


O&M BUDGET BY SECTION

FY 2016/17 BUDGET BY SECTION



FY 2017/18 BUDGET BY SECTION



	2015/16	2015/16 2016/17 Change from 2017/18		Change from	Personnel Budget			
	Budget	Budget	2015/16	Budget	2016/17	15/16	16/17	17/18
Office of the General Manager	4,230,100	4,207,600	(22,500)	4,273,200	65,700	13	12	12
Bay-Delta Initiatives	8,126,400	7,864,300	(262,000)	7,939,100	74,800	19	19	19
Board Support	1,149,000	1,204,600	55,600	1,218,500	13,900	5	5	5
Total O&M	13,505,500	13,276,500	(229,000)	13,430,900	154,400	37	36	36

Note – Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		32	36	35	(1)	35	_
	O&M	32	36	35	(1)	35	_
	Capital	_	_	_	_	_	_
Temporary		_	1	1	_	1	_
	O&M	_	1	1	_	1	_
	Capital	_	_	_	_	_	_
Total Personnel		32	37	36	(1)	36	_
	O&M	32	37	36	(1)	36	_
	Capital	_	_	_	_	_	_

Note - Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Office of the General Manager's Biennial Budget is \$13.3 million in FY 2016/17 and \$13.4 million in FY 2017/18 or a decrease of 1.7% and an increase of 1.2%, respectively from the prior budget years. The main factors affecting these changes:

- Salaries and Benefits costs were reduced as a result of the elimination of one regular position.
- Costs for Travel and Conferences & Meetings were increased to respond to and promote key initiatives, notably those related to the Bay Delta and Colorado River supplies.
- Offsetting these increases was a reduction in professional services mainly related to drought-related science projects funded in FY 2014/15 that are now nearing completion.
- At the General Manager's direction, budgets were restated to reflect the movement of the Inspection trip Team to External Affairs.

The following are the significant changes by budget year.

FY 2016/17

Personnel-related issues

Total personnel count was reduced by one from the FY 2015/16 budget with the elimination of a position.

Salaries and Benefits reflect negotiated labor increases.

Professional Services

The budget decrease is mainly due to the exclusion of funding for State and Federal Contractors Water Agency drought-related science projects that were funded in FY 2014/15 but are now nearing completion. Other Bay-Delta related projects undertaken by Engineering

Services in FY 2014/15 and FY 2015/16 that were funded through Bay Delta initiative are also not included in the budget for FY 2016/17.

FY 2017/18

Personnel-related issues

Total personnel count remains flat with FY 2016/17.

Salaries and Benefits reflect the district's overall cost increase for operating expenses of 2.25%.

Professional Services

The budget decrease is due to the completion of some projects that are not anticipated to continue this year.

WATER SYSTEM OPERATIONS

Water System Operations (WSO) group reliably treats and delivers highquality water to Metropolitan's member agencies in an efficient, sustainable, and environmentally responsible manner.

PROGRAMS

Water System Operations treats and delivers water from the Colorado River and the State Water Project (SWP) through a raw water conveyance system, five treatment plants, and an extensive treated water distribution network. Water quality is paramount and all functions focus on producing and maintaining water surpassing drinking water standards.

WSO accomplishes its mission through the following programs or sections:

Office of Manager provides day-to-day operational management as well as strategic and organizational leadership, directing all initiatives and core business efforts of WSO. The office also provides support functions such as budgeting, administration, and security. The security function ensures that Metropolitan's employees, water infrastructure, and equipment are adequately protected.

Operations Support Services provides a diverse range of support to Metropolitan's core operational reliability functions and, on a reimbursable basis, to public entities such as DWR and member agencies. The Manufacturing unit performs fabrication, machining, coating, valve and pump refurbishment, underwater maintenance, and crane safety and certification. Construction Services unit performs general construction, large equipment transportation, equipment installation, and emergency response. The Fleet Services unit acquires and maintains vehicles and emergency generators. The Power & Equipment Reliability unit provides maintenance services which include: predictive, preventive, and corrective maintenance analysis for critical

equipment, including all hydroelectric power plants, pressure control structures, high voltage equipment, and heating, ventilation, and air conditioning (HVAC) systems. Additionally, the section helps member agencies with service connection requests.

Water Treatment operates and maintains five water treatment plants with a combined capacity of over 2.6 billion gallons per day. The section oversees treatment processes to ensure high-quality water is reliably produced that complies with drinking water regulations. All five treatment plants are staffed and operated 24 hours a day, seven days a week. Four of the treatment plants (Jensen, Mills, Skinner, and Diemer) have been retrofit to use ozone as the primary disinfectant. Ozone construction is underway at the Weymouth plant and, by the end of this Biennial Budget, the nearly \$1.3 billion ozone retrofit program will be complete.

Water Conveyance and Distribution meets delivery requirements of member agencies by moving water throughout Metropolitan's 5,200 square mile service area and performing a wide range of operations and maintenance activities to ensure system reliability. The conveyance system consists primarily of the Colorado River Aqueduct system and five pumping plants. The distribution system consists of about 820 miles of pipelines, approximately 350 service connections to member agencies, 16 hydroelectric plants, and 9 storage and regulatory reservoirs that help Metropolitan meet peak flow periods.

Water Quality ensures that Metropolitan provides safe and aesthetically pleasing water through the following activities: conducting chemical and biological analyses; optimizing existing treatment processes; testing new technologies to assure compliance with current and future regulations; and providing technical expertise, laboratory services, and troubleshooting of water quality issues for Metropolitan and its member agencies. Water Quality also works to preserve and improve source water quality through rigorous watershed surveys and advocating for measures to reduce the risk of point and non-point source pollution.

Water Operations and Planning plans and implements the movement and use of water resources. These plans incorporate infrastructure and supply limitations, agency demands, changing water quality requirements, and storage program economics. Operational scenarios that encompass a broad range of potential supplies and demands are developed and refined on a weekly basis throughout the year. This process prepares WSO for a wide variety of possible outcomes as the year develops while maintaining reliable deliveries and balancing water storage reserves at reasonable cost.

In addition, the section programs and maintains Metropolitan's control system, known as Supervisory Control and Data Acquisition (SCADA) and is also responsible for emergency response management and providing emergency response training to employees.

Safety and Environmental Services is

responsible for ensuring a safe working environment for employees through programs and training, ensuring business operations are conducted in an environmentally responsible way, and complying with all environmental and occupational health and safety rules and regulations. The section integrates environmental, health and safety practices into Metropolitan's operations and culture with the

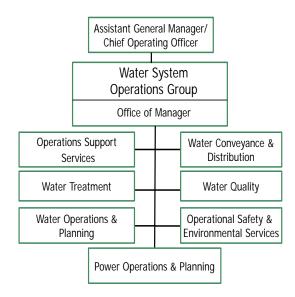
goal of achieving a safe work place and eliminating environmental incidents.

In addition, the section manages technical skills training for maintenance craft employees and sponsors an accredited apprenticeship program which trains industrial mechanics and electricians over a four-year period of classroom and hands-on instruction.

Power Operations and Planning plans, acquires and accounts for the energy required to operate the Colorado River Aqueduct (CRA). This activity requires energy transactions with electric utilities and marketers. The section also

activity requires energy transactions with electric utilities and marketers. The section also negotiates and manages the contracts and energy accounting of Renewable Energy Credits and Greenhouse Gas Allowances for 16 small hydroelectric power plants and the CRA.

In addition, the section is generally responsible for most wholesale energy activities including evaluation of proposed energy-related regulations and legislation; analysis of state and regional transmission plans and impacts to the CRA transmission system; and reporting on compliance with regional and national electric reliability standards. Finally, the section works closely with energy staff at DWR on energy and transmission issues for the SWP.



GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, WSO will focus on the following key issues:

System Reliability

Manage and maintain the water system to ensure operational reliability for all reasonably expected demands.

As the drought eases, rebuild water storage into accounts that provide the greatest delivery flexibility and cost effectiveness.

Plan, schedule, and execute the Annual Shutdown Plan to ensure reliable operation of the water delivery system, including a strategy to manage longer shutdowns to support the refurbishment of pre-stressed concrete cylinder pipelines.

Maintain eight-pump flow readiness and manage storage accounts to capture all available Colorado River supplies.

With member agency and regional partners, develop new water supplies to supplement the core SWP and Colorado River supplies including groundwater recovery, ocean desalination, and indirect potable reuse.

Participate with the California Department of Water Resources (DWR) on value-engineering efforts to ensure cost-effective rehabilitation of SWP conveyance, pumping, and generation facilities.

Fully utilize the manufacturing shops in La Verne to maintain Metropolitan's infrastructure reliability and support projects for DWR and the member agencies.

Establish vibration-based predictive maintenance program for all large electric motors, vertical turbine pumps, and emergency generators to improve equipment reliability and reduce unnecessary maintenance.

Provide secure facilities through employee training, access controls, incident monitoring, and

response for critical infrastructure sites and office locations.

Conduct emergency response exercises involving internal operational groups and member agencies.

Energy Management

Manage and limit price exposure for wholesale energy to support CRA pumping.

Secure an agreement for coordinated electrical operations of the CRA.

Workforce Development & Succession Planning

Conduct annual Management Academy to improve internal recruitment pool for entry-level supervisors.

Recruit and begin training a new apprentice class each year for the mechanical and electrical trades.

Water Quality, Environmental Protection, and Safety

Meet or surpass all drinking water standards and ensure delivery of aesthetically pleasing water.

Engage in the regulatory process to ensure full consideration of technical and economic feasibility for drinking water and environmental regulations.

Engage watershed stakeholders and regulators to ensure effective control of source water contaminants such as uranium, perchlorate, chromium, pharmaceuticals, nutrients, and algal toxins.

Complete implementation of ozone retrofit program with the startup of ozone at the Weymouth plant.

Provide safety and environmental services to ensure safe work practices and adhere to environmental and workplace health and safety regulations.

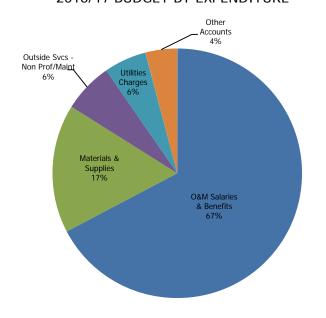
O&M FINANCIAL SUMMARY

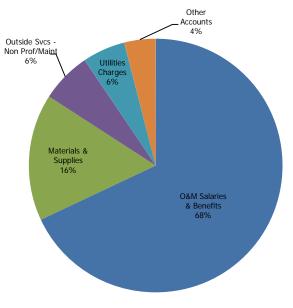
	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	155,336,500	155,277,700	159,583,100	4,305,400	164,188,300	4,605,200
Direct Charges to Capital	(7,391,500)	(7,222,700)	(7,126,100)	96,600	(7,161,700)	(35,600)
0&M Salaries and Benefits	147,945,000	148,055,000	152,457,000	4,402,000	157,026,600	4,469,600
% Change		0.1%		3.0%		3.0%
Professional Services	1,325,900	2,377,000	1,119,000	(1,258,000)	1,060,500	(58,500)
Materials and Supplies	36,671,100	39,381,200	37,725,800	(1,655,400)	37,323,200	(402,600)
Outside Services - Non Professional / Maintenance	13,508,100	15,307,800	14,575,100	(732,700)	14,841,100	266,000
Utilities Charges	13,904,900	13,651,900	12,483,200	(1,168,700)	12,576,300	93,100
Other Accounts	9,076,100	7,687,300	8,209,700	522,400	8,146,800	(62,900)
Total O&M	222,431,100	226,460,200	226,569,800	109,500	230,974,500	4,404,800
% Change		1.8%		(0.0%)		1.9%
Operating Equipment	7,311,300	7,019,900	4,489,200	(2,530,700)	5,539,400	1,050,200
Total O&M and Operating Equipment	229,742,400	233,480,100	231,059,000	(2,421,100)	236,513,900	5,454,900
% Change		5.0%		(1.0%)		2.4%

Note – Totals may not foot due to rounding.

2016/17 BUDGET BY EXPENDITURE

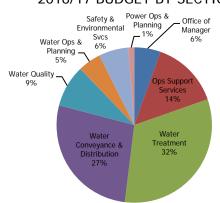
2017/18 BUDGET BY EXPENDITURE



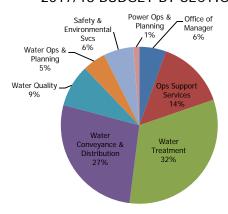


O&M BUDGET BY SECTION

2016/17 BUDGET BY SECTION



2017/18 BUDGET BY SECTION



	2015/16	2016/17	Change from	2017/18	Change from	Personnel Budget		
	Budget	Budget	2015/16	Budget	2016/17	15/16	16/17	17/18
Office of the Manager	12,769,300	12,439,500	(329,700)	12,759,300	319,800	20	19	19
Operations Support Services	32,292,800	32,042,800	(250,000)	32,803,700	760,900	153	161	161
Water Treatment	75,815,600	73,218,000	(2,597,600)	74,550,100	1,332,100	275	273	273
Water Conveyance and Distribution	57,196,000	61,530,600	4,334,500	62,671,900	1,141,300	267	271	271
Water Quality	20,409,400	19,771,400	(638,000)	20,118,100	346,700	95	93	93
Water Operations and Planning	10,691,300	10,786,100	94,800	10,990,100	204,000	43	43	43
Safety and Environmental Svcs	14,342,800	13,985,400	(357,400)	14,228,500	243,100	54	55	55
Power Operations and Planning	2,943,200	2,796,000	(147,200)	2,852,900	56,900	11	11	11
Total O&M	226,460,300	226,569,800	109,500	230,974,600	4,404,800	917	926	926

Note – Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		883	949	951	2	951	_
	0&M	852	903	907	4	907	_
	Capital	31	46	44	(2)	44	_
Temporary		30	14	19	5	19	_
	0&M	28	14	19	5	19	_
	Capital	1	_	_	_	_	_
Total Personnel		913	963	970	7	970	_
	0&M	880	917	926	9	926	_
	Capital	32	46	44	(2)	44	_

BUDGET HIGHLIGHTS

WSO's biennial O&M and Operating Equipment budget is \$231.1 million in FY 2016/17 and \$236.5 million in FY 2017/18 or a decrease of 1.0% and an increase of 2.4%, respectively from the prior year budgets. The decrease is due primarily to the following factors:

- Lower treated water flows, falling worldwide commodity prices and lower chemical dosages needed to treat the more abundant Colorado River supplies has resulted in the reduction of chemical costs for water treatment.
- Lower-than-projected electrical rates and new solar energy production has resulted in decreased utility costs.
- A reduction in professional services primarily due to the deferral or winding down of projects.
- Overall reduction in security costs as a result of a highly competitive bid for new security guard contract.

The following are the significant changes by budget year.

FY 2016/17

Personnel-related issues

For O&M work, the complement of regular employees was increased by two positions to reflect increased support for servicing the vehicle fleet and a shift of two positions back to O&M as a result of decreasing capital work. In addition, the equivalents of 5 temporary employees were added to offset peak workload and long-term employee absences.

Salaries and Benefits reflect negotiated labor increases.

Professional Services

The budget reflects the deferral or winding down of projects. Budget is based on historical spending and planned projects.

Materials and Supplies

The budget reflects decreased chemical costs for water treatment due to lower treated water flows, falling worldwide commodity prices and lower chemical dosages needed to treat Colorado River supplies.

Utilities Charges

The budget reflects decreased electricity costs due to lower-than-projected electrical rates and new solar energy production.

Other

The Outside Services-Non
Professional/Maintenance budget reflects
decreased security costs resulting from highly
competitive bid for new security guard contract.

FY 2017/18

Personnel-related issues

Overall personnel count for both 0&M and capital work remains flat from the FY 2016/17 budget.

Salaries and Benefits reflect the district's overall cost increase for operating expenses of 2.25%.

Materials and Supplies

The budget reflects inflationary pressure anticipated on materials and supplies and offset by less chlorine required to treat quagga mussels as a result of a decrease in CRA imported water.

Utilities Charges

The budget reflects higher anticipated electricity rates from FY 2016/17.

Other

Outside Services-Non Professional/Maintenance budget reflects increased cost anticipated for annual security guard contract.

Operating Equipment – FY 2016/17 and FY 2017/18

The operating equipment budget has been reduced in this Biennial Budget which results in a slightly aging fleet, particularly for lighter-duty vehicles. Priority was placed on maintaining sufficient heavy equipment for emergency response and aqueduct maintenance. For emergency response, the goal is to enable an internal response to two simultaneous pipeline breaks.

This page intentionally left blank.

WATER RESOURCE MANAGEMENT

Water Resource Management (WRM) plans, secures, and manages water resources that Metropolitan supplies to its member agencies in a reliable, cost-effective, and environmentally responsible manner.

PROGRAMS

Water Resource Management protects and optimally manages imported water quantity and quality; advances water-use efficiency; provides supply and demand forecasts that are the foundation for resource planning; and develops and implements timely resource planning, programs, and projects.

In addition, WRM assists member agencies in optimizing their use of local resources to benefit the entire Metropolitan service area and ensures Metropolitan receives a fair return on contractual investments in local and imported resources.

Water Resource Management accomplishes its mission through the following programs or sections:

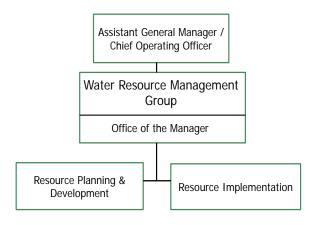
Office of Manager directs the group's efforts in planning, securing, and managing Metropolitan's water resources; monitors and tracks the group's business plan, financial and budgetary initiatives; and provides administrative and business process support.

Resource Planning & Development is

responsible for providing an integrated water supply and demand forecast that will meet the needs of member agencies and reflect their longrange planning efforts for local supplies which sets the foundation for Metropolitan's resource mix and local supplies needed to meet demands. This section also supports the development of resource programs, projects, and infrastructure to meet projected resource targets; administers the

planning process; defines strategies for meeting service area water needs including the Integrated Resource Plan (IRP) and Water Surplus and Drought Management (WSDM) plan; and develops resource options, such as groundwater conjunctive use, regional recycling and seawater desalination; as well as alternatives for short-range planning and implementation through joint action with Water System Operations.

Resource Implementation develops and administers water resource programs and contracts, and pursues application of new technologies and innovation for the Colorado River, State Water Project, water recycling, groundwater recovery, and conservation. This section also monitors and responds to regulatory, legislative, and operational activities that may influence Metropolitan's rights and benefits related to the quality, reliability and cost of water.



GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, WRM will focus on the following key issues:

Colorado River

Evaluate continuing challenges to the Quantification Settlement Agreement (QSA) and develop strategies to respond to changed conditions.

Protect Colorado River resources, Metropolitan's Colorado River rights, and optimize the use of available Colorado River water.

Facilitate salinity management projects and other actions that protect and improve source water quality.

Partner with other Colorado River water delivery contractors to develop new Metropolitan supplies, including cross-border water supply programs.

Administer Imperial Irrigation District (IID) and Palo Verde Irrigation District (PVID) agricultural conservation programs.

Work with representatives of the International Boundary and Water Commission and United States Bureau of Reclamation (USBR) to continue implementation of Minute 319 and coordinate emergency deliveries for Tijuana.

Continue administration of pilot system water projects that help keep Lake Mead levels above shortage triggers.

Develop strategy and tools for managing new agricultural land purchases in the Palo Verde Valley.

Groundwater Storage Program

Continue management of nine approved conjunctive use programs to store water for dry-year yield.

Continue facilitation of dialogue among agencies in groundwater management, recycled water production, and stormwater and flood management to enhance groundwater basin recharge.

Continue to monitor and inform member agencies and groundwater managers of proposed legislation and regulations that potentially affect groundwater recharge or management.

Legislative Review

Continue to review and provide comments on proposed state and federal legislation on water resources issues related to Metropolitan's mission and WRM functions.

Regional Resources and Water Conservation

Implement Long-Term Water Conservation Plan and new LRP initiatives to meet 20x2020 urban water use reduction target.

Pursue grant funding supplement implementation of regional water conservation program initiatives.

Participate in activities leading to expanded use of recycled water and increased water-use efficiency.

Administer agreements that provide incentives for conservation, recycled water, recovered groundwater production, and support development of local resource development projects.

Conduct research to advance local resource and conservation program effectiveness.

Seawater Desalination

Continue to develop and actively participate in CalDesal and support its regulatory and legislative initiatives with the State's Ocean Plan and the Ocean Protection Council's draft Strategic Action Plan.

State Water Project

Renegotiate the SWP contract, extending the contract term, and adjust cost repayment provisions to reflect longer term supply and repayment needs.

Ensure accurate billings and influence sound financial decisions by DWR, including effective DWR energy management practices with regard to renewable energy, emissions reductions, transmission strategies, and energy acquisitions.

Continue to discuss and resolve disputed charges for the SWP.

Protect SWP water, power, and financial positions under the Oroville Federal Energy Regulatory Commission (FERC) relicensing process as well as associated litigation and upcoming FERC relicensing and several DWR facilities in Southern California.

Support Metropolitan's interests in any SWP-related litigation.

Coordinate major rehabilitations and new SWP capital improvements to ensure cost-effective and reliable water supply, energy generation, and use.

Promote water quality monitoring and forecasting activities and raise awareness of potential water quality impacts from operational decisions.

Develop and implement strategies to access SWP conveyance facilities to optimize use of Metropolitan water transfer and banking programs in light of scheduled and forced infrastructure outages.

Continue participation in State Water Contractors, Inc., State Water Project Contractors Authority, and State and Federal Water Contractors Authority to coordinate activities at a statewide level.

Future Supply Actions

Staff will consider other future supply actions as deemed necessary.

Continue participation in the Southern California Water Committee Stormwater Task Force to identify opportunities and remove obstacles to increases in stormwater capture and infiltration for measurable groundwater yield.

Water Supply and System Planning

Complete annual progress reports on IRP implementation and Metropolitan's water supplies and achievements in conservation, recycling, and groundwater recharge (SB 60 report).

Complete the annual forecast of Metropolitan sales to support revenue requirements and budget process.

Explore potential partnerships with member agencies and other entities for development of regional seawater desalination, recycling, and groundwater replenishment facilities.

Upgrade and enhance planning tools, such as computer models for demand forecasting, resource program evaluation, and distribution system.

Continue work with the Water Utility Climate Alliance to perform case studies on climate data applications to water resources planning.

Water Transfers and Exchanges Program

Continue to manage existing water transfer, exchange, and storage programs along the California Aqueduct and Colorado River Aqueduct and implement approved water transfers.

Pursue additional water transfers and exchanges as needed.

Work with other State Water Contractors on a long-term water transfer permitting process.

Workforce Development & Succession Planning

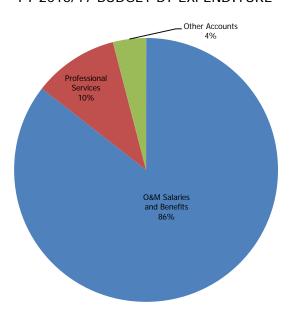
Continue to develop staff expertise in critical areas to prepare for future employee retirements or departures.

O&M FINANCIAL SUMMARY

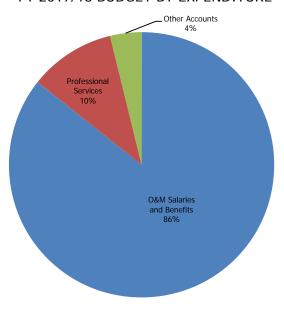
	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	12,717,400	14,157,500	14,288,800	131,300	14,574,300	285,500
Direct Charges to Capital	(2,000)	_	_	_	_	_
O&M Salaries and Benefits	12,715,400	14,157,500	14,288,800	131,300	14,574,300	285,500
% Change		11.3%		0.9%		2.0%
Professional Services	1,322,100	2,113,200	1,710,000	(403,200)	1,740,000	30,000
Grant / Donation Expense	102,000	125,000	125,000	_	125,000	_
Graphics & Reprographics	11,200	79,900	35,700	(44,200)	25,700	(10,000)
Materials and Supplies	125,300	82,300	104,400	22,100	89,400	(15,000)
Memberships & Subscriptions	181,600	185,700	4,998,400	4,812,700	5,365,000	366,600
Rent & Leases	11,500	10,000	45,000	35,000	43,000	(2,000)
Training & Seminars Costs	10,700	46,000	36,200	(9,800)	36,200	_
Travel Expenses	139,200	156,500	126,000	(30,500)	126,100	100
Other Accounts	85,500	201,800	114,400	(87,400)	114,000	(400)
Total O&M	14,704,500	17,157,900	21,583,900	4,426,100	22,238,700	654,800
% Change		16.7%		25.8%		3.0%

Note – Totals may not foot due to rounding.

FY 2016/17 BUDGET BY EXPENDITURE



FY 2017/18 BUDGET BY EXPENDITURE

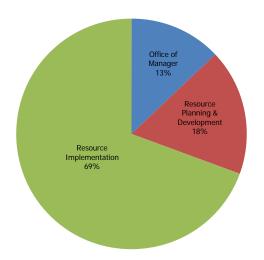


O&M BUDGET BY SECTION

FY 2016/17 BUDGET BY SECTION

Office of Manager 13% Resource Planning & Development 18% Resource Implementation 69%

FY 2017/18 BUDGET BY SECTION



	2015/16	2016/17	Change from	2017/18	Change from	Personnel Budget		
	Budget	Budget	2015/16	Budget	2016/17	15/16	16/17	17/18
Office of Manager	3,559,500	2,811,900	(747,600)	2,871,000	59,100	19	14	14
Resource Planning & Development	4,276,500	3,881,900	(394,600)	3,935,900	54,000	15	16	16
Resource Implementation	9,321,900	14,890,200	5,568,200	15,431,900	541,700	34	38	38
Total O&M	17,157,900	21,583,900	4,426,100	22,238,700	654,800	68	68	68

Note - Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		59	68	68	-	68	_
	0&M	59	68	68	_	68	_
	Capital	_	_	_	_	_	_
Temporary		_	_	_	_	_	_
	0&M	_	_	_	_	_	_
	Capital	_	_	_	_	_	_
Total Personnel		59	68	68	_	68	_
	0&M	59	68	68	_	68	_
	Capital	_	_	_	_	_	_

Note – Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

WRM's Biennial Budget is \$21.6 million in FY 2016/17 and \$22.2 million in FY 2017/18, or an increase of 25.8% and 2.8%, respectively from the prior budget years. The Biennial Budget includes association dues related to SWP and CRA previously budgeted in 0ther 0&M. Excluding these association dues, WRM achieved a 2.9% decrease between FY 2015/16 and FY 2016/17 while taking on additional responsibilities related to Colorado River Program Desert Land Management. The decrease was primarily due to the following factors:

- The primary factor, professional services, has been decreased through the reduction or deferral of various conservation research studies, system analysis technical studies, supply and aqueduct modeling, and water use investigations. The reduction may limit the ability to provide timely responses to technical studies and update models for the water resource evaluation.
- Some memberships were eliminated that may reduce the ability to collaborate with other boards or agencies on statewide and federal issues.

The following are the significant changes by budget year.

FY 2016/17

Personnel-related issues

Total personnel count remains flat with the FY 2015/16 budget.

Salaries and Benefits budget reflects anticipated retirements and vacancies filled at lower level job classifications offset by negotiated labor increases.

Professional Services

The budget reflects reduced technical services for Colorado River water use mapping and monitoring, conservation research studies, IRP, system analysis technical studies and eliminated SWP supply and aqueduct modeling support. These reductions were offset by professional services related to Colorado River Program Desert Land Management.

Memberships and Subscriptions

Budget includes association dues for SWP and CRA previously budgeted in Other O&M.

Budget also reflects the elimination of memberships and subscriptions for Western Urban Water Coalition, California Urban Water Agencies, and WaterReuse Foundation.

Other

The budget reflects reduced travel associated with SWP, CRA, conservation, and local resources program and a reduction in conservation marketing materials and IRP reports.

FY 2017/18

Personnel-related issues

Total personnel count remains flat with the FY-2016/17 budget.

Salaries and Benefits reflect the district's overall cost increase for operating expenses of 2.25%.

Professional Services

The budget reflects an increase related to the State Water Contract audit.

ENGINEERING SERVICES

Engineering Services Group provides innovative, high-quality, and costeffective solutions to meet our customers' needs and to ensure the longterm reliability and successful operation of Metropolitan's infrastructure.

PROGRAMS

Engineering Services performs project management, design, construction management, environmental planning, infrastructure protection monitoring, water-related facility planning, and manages Metropolitan's Capital Investment Plan (CIP).

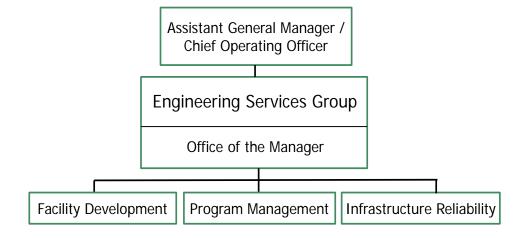
Engineering Services accomplishes its mission through the following programs or services:

Office of the Group Manager oversees the management of the Engineering Services group by providing strategic leadership on engineering initiatives and core business efforts, to ensure the continued reliability and quality of water deliveries.

Facility Development is responsible for providing design, environmental planning, and local and regional water-related facility planning services.

Infrastructure Reliability is responsible for construction management and for the monitoring and protection of Metropolitan's infrastructure.

Program Management is responsible for overall project delivery of capital and O&M projects, and serves as Metropolitan's "Owner's Engineer."



GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, Engineering Services will focus on the following key issues:

California Water Fix and California Eco Restore

Provide engineering and program management leadership in support of the California Water Fix and California Eco Restore initiatives.

Drought Management

Develop and execute projects to optimize water system operations and expand the delivery of Colorado River water to areas of the distribution system that are normally supplied by the State Water Project.

Expedite development of a Regional Recycled Water Supply Program including the design and construction of a demonstration-scale recycled water treatment plant, and preparation of a comprehensive feasibility study of a full-scale recycled water system.

Continue to support opportunities to collaborate with other agencies to enhance local water supplies.

Infrastructure Reliability

Manage and complete Board-authorized projects within the CIP to ensure the reliable delivery of water to Metropolitan's member agencies.

Provide engineering and technical services to support the operation and maintenance of Metropolitan's water conveyance, delivery, and treatment facilities.

Protect public safety, minimize future costs of infrastructure maintenance and repairs, avoid unplanned outages by monitoring Metropolitan's facilities and right-of-way, and performing essential technical assessments.

CIP Management

Execute and prioritize capital projects to address Metropolitan's short-term needs and long-term objectives, and optimize utilization of internal and external resources.

Evaluate project performance to identify and implement improvements in project delivery.

Employee Development

Lead workforce development and succession planning activities to optimally maintain technical expertise and skills needed in the future.

Customer Service

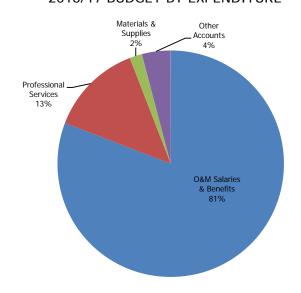
Provide technical leadership and services to meet Metropolitan's business needs.

O&M FINANCIAL SUMMARY

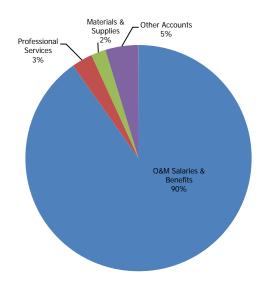
	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	68,237,600	68,811,500	72,098,200	3,286,700	73,586,700	1,488,500
Direct Charges to Capital	(41,307,600)	(41,895,500)	(45,450,400)	(3,554,900)	(47,913,900)	(2,463,500)
0&M Salaries and Benefits	26,930,000	26,916,000	26,647,800	(268,200)	25,672,800	(975,000)
% Change		(0.1%)		(1.0%)		(3.7%)
Professional Services	1,161,600	1,445,300	4,371,000	2,925,700	851,000	(3,520,000)
Communication Expenses	95,200	130,000	100,000	(30,000)	100,000	_
Materials and Supplies	578,400	448,800	580,200	131,400	602,200	22,000
Memberships & Subscriptions	89,400	146,700	181,300	34,600	188,900	7,600
Taxes & Permits	371,500	302,000	320,000	18,000	330,000	10,000
Travel Expenses	167,600	261,900	140,400	(121,500)	130,000	(10,400)
Utilities Charges	166,800	240,000	180,000	(60,000)	180,000	_
Other Accounts	558,900	380,200	433,600	53,400	414,800	(18,800)
Total O&M	30,119,400	30,270,900	32,954,300	2,683,400	28,469,700	(4,484,600)
% Change		0.5%		8.9%		(13.6%)
Operating Equipment	566,200	406,300	435,400	29,100	258,800	(176,600)
Total O&M and Operating Equipment	30,685,600	30,677,200	33,389,700	2,712,500	28,728,500	(4,661,200)
% Change		1.9%		8.8%		(14.0%)

Note – Totals may not foot due to rounding.

2016/17 BUDGET BY EXPENDITURE

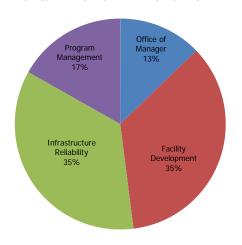


2017/18 BUDGET BY EXPENDITURE

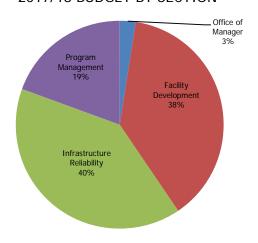


O&M BUDGET BY SECTION

2016/17 BUDGET BY SECTION



2017/18 BUDGET BY SECTION



	2015/16	2016/17	Change from	2017/18	Change from	Personnel Budget		
	Budget	Budget	2015/16	Budget	2016/17	15/16	16/17	17/18
Office of Manager	1,117,700	4,219,200	3,101,500	703,500	(3,515,700)	8	1	1
Facility Development	12,010,200	11,598,100	(412,100)	10,831,700	(766,400)	55	50	45
Infrastructure Reliability	11,404,300	11,601,600	197,300	11,397,700	(203,900)	60	58	56
Program Management	5,738,700	5,535,500	(203,300)	5,536,800	1,382	23	30	29
Total O&M	30,270,900	32,954,300	2,683,400	28,469,700	(4,484,600)	146	139	131

Note - Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		345	371	371	_	371	_
	0&M	134	146	139	(7)	131	(8)
	Capital	211	225	232	7	240	8
Temporary		2	_	_	_	_	_
· · ·	0&M	_	_	_	_	_	_
	Capital	2	_	_	_	_	_
Total Personnel		347	371	371	_	371	_
	0&M	134	146	139	(7)	131	(8)
	Capital	213	225	232	7	240	8

Note - Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

Engineering Services O&M budget is \$33.0 million in FY 2016/17 and \$28.5 million in FY 2017/18. As detailed below, Engineering Services' budget is influenced significantly by a new initiative, Metropolitan's Regional Recycled Water Supply Program. During FY 2016/17, a conceptual feasibility study for this program will be conducted that is categorized as a Major O&M project. This effort is planned to be completed within that fiscal year.

Total planned 0&M expenditures for FY 2016/17 are approximately \$2.7 million or 8.9% more than in FY 2015/16, with the addition of Major 0&M support required for Metropolitan's Regional Recycled Water Supply Program. All support to the California Water Fix initiative is planned to be funded under a reimbursable agreement.

For FY 2017/18, planned 0&M expenditures are approximately \$4.5 million or 13.6% less than in FY 2016/17, due to completion of Major 0&M work in support of the Regional Recycled Water Supply Program.

O&M	FY 2015/16	FY 2016/17	FY 2017/18
Labor	\$26,916,000	\$25,105,100	\$25,672,800
Non-labor	\$3,354,900	\$2,786,500	\$2,796,900
Total O&M	\$30,270,900	\$27,891,600	\$28,469,700
Recycled Water (labor & non-labor)	\$0	\$5,062,700	\$0
Total O&M & Special Initiative	\$30,270,900	\$32,954,300	\$28,469,700
% Change		8.9%	(13.6%)

Note: Excludes Operating Equipment

The following are the significant changes by budget year.

FY 2016/17

Personnel-Related Issues

Total personnel levels remain consistent with the previous fiscal year. However, the O&M and capital complement is different from the FY 2015/16 budget. This is primarily due to the shift in Major O&M work with the California Water Fix initiative no longer being funded under Major O&M as it is planned to funded under a reimbursable agreement, and Major O&M support required for Metropolitan's Regional Recycled Water Supply Program.

Planned capital expenditures for FY 2016/17 are approximately \$56 million less than in

FY 2015/16, with a total capital budget of \$180 million. This decrease in planned expenditures reflects a readjustment of project budgets and schedules to meet Metropolitan's overall biennial budgetary goals. Actual capital expenditures during the FY 2015/16 are also projected to be about \$33 million less than budgeted.

Salaries and Benefits reflect negotiated labor increases.

Professional Services

The budget primarily reflects increases to support Metropolitan's Regional Recycled Water Supply Program.

Materials and Supplies

The budget reflects an increase in design-related software maintenance costs.

Travel Expenses

The budget reflects decreases of travel-related expenses for the California Water Fix initiative, which is planned to be funded under a reimbursable agreement.

Utility Charges

The budget reflects an overall decrease in Engineering Services' utility costs at the La Verne facility based on current expenditure trends.

Other

Other non-labor budget includes planned expenditures to support Metropolitan's Regional Recycled Water Supply Program and Engineering's workforce development programs (e.g., Career Launch, Mentoring Program, etc.).

FY 2017/18

Personnel-related issues

Total personnel levels remain consistent with the previous fiscal year. However, the O&M and capital complement is different from the FY 2016/17 budget. This is primarily due to the planned completion of Major O&M work in FY 2016/17 for Metropolitan's Regional Recycled Water Supply Program, resulting in a shift of O&M staffing to CIP in FY 2017/18.

Planned capital expenditures for FY 2017/18 will remain steady, with a total capital budget of \$180 million. High priority projects that will continue during the fiscal year include the Weymouth Oxidation Retrofit Program, which will be completed; the Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program; the Colorado River Aqueduct (CRA) Reliability Programs; and the Right of Way and Infrastructure Protection Program.

Salaries and Benefits reflect the district's overall cost increase for operating expenses of 2.25%.

Professional Services

The budget primarily reflects a decrease due to completion of support to Metropolitan's Regional Recycled Water Supply Program.

Materials and Supplies

The budget reflects anticipated increases in design-related software maintenance costs.

Other

The Conference and Meetings budget reflects decreases due to completion of support to Metropolitan's Regional Recycled Water Supply Program.

Operating Equipment – FY 2016/17 and FY 2017/18

The operating equipment budget reflects a slight increase from FY 2015/16 to FY 2016/17, and then a decrease in FY 2017/18 primarily due to the deferral of vehicle replacements. Other equipment identified to be replaced includes robotic total stations (field survey equipment) which have already exceeded their expected service life.

BUSINESS TECHNOLOGY

Business Technology Group (BTG) provides outstanding value to its customers for a wide range of administrative and technical services.

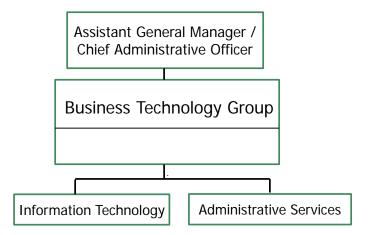
PROGRAMS

Business Technology group accomplishes its mission through the following programs or sections:

Administrative Services provides a range of services including contracting, procurement, inventory management, warehousing, graphics, technical writing, grant management, records management, and administration of Metropolitan's Rideshare Program.

In addition, the section oversees Metropolitan's annexation functions.

Information Technology delivers comprehensive technology services and solutions in water systems and business applications (e.g., laboratory information management system, financial and human resource systems, maintenance management system, etc.), geographic information systems, telecommunications/networks, SCADA, programming, network communications, and computer hardware and software.



GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, BTG will focus on the following key issues:

Business Technology & Process Enhancement

Implement projects in support of the Information Technology Strategic Plan (ITSP) update. Expected initiatives include additional migration to mobile technology and implementation of cloud solutions to enhance productivity and streamline business processes, mitigate cost or cost avoidance.

Continue with the development of the Water System Control Master Plan to fully coordinate and further protect the operational and business investments of Metropolitan's SCADA systems.

Continue to evaluate emerging technology advancements in the business environment to determine their application for Metropolitan.

Continue to promote procurement training methods including online training for credit card use and agreement administration to further the customer's knowledge of available procurement tools and value added opportunities for Metropolitan.

Continue to monitor and participate in local and national efforts aimed at enhancing security capabilities for water utilities.

Partner with the Engineering Services and Water Systems Operations groups to begin deployment of a Water Systems Asset Information Program that will support ongoing and future planning, engineering, operations, maintenance, and asset management.

Initiate the design phase of the Enterprise Content Management (ECM) system to satisfy existing and future compliance of physical and electronic records in line with fiscal, legal, and regulatory requirements. As part of a strong ECM strategy and design, the system will provide a framework for collaboration and automation while protecting Metropolitan by reducing risk of exposure in litigation, enhancing efficiency of core business

processes, and supporting the enterprise business continuity plan.

Information Systems Upgrades and Projects

Complete upgrade for Enterprise Learning Management.

Initiate project to replace the critical data storage devices at Metropolitan Headquarters datacenter to provide sufficient computing power and modernize the datacenter to meet current and future needs.

Deploy phase one of a three-phase project to improve the reliability, performance, and capacity of Metropolitan's wireless network infrastructure comprising of microwave radio wide-area networks (WANs) and wireless access point local-area-networks (LANs).

Begin the first phase of the project to implement power, grounding, and HVAC upgrades to computer rooms and communications facilities to ensure that critical IT, WSO, and business systems remain operational for required emergency durations in the event of a temporary electrical power outage.

Deploy the upgrade of audio, video and information technology-related equipment in the main board room and all committee rooms in Metropolitan's headquarters building.

Complete final design and seek Board approval for a construction contract to upgrade the control and electrical protection systems at the Wadsworth Pumping Plant to ensure continued reliability of the facility.

Continue enhancements to Metropolitan's cyber security capabilities to ensure protection against evolving cyber threats.

Complete deployment of the emergency two-way radio system to improve its coverage, reliability, ease of use and durability during emergencies.

Initiate an infrastructure upgrade at Metropolitan's IT Disaster Recovery Facility (DRF) in Riverside County. The upgrade will equip the facility with necessary upgrades to hardware and software to recover critical IT systems at a desired performance level and reduce risk of disruption of these business systems.

Sustainability Efforts

Continue with innovative sustainability efforts in business practices and employee education by hosting Metropolitan's Annual Spring Green Expo and Innovators Showcase, Metropolitan's Rideshare Program to reduce travel emission, and the Our Legacy e-Newsletter for employees.

Facility & Energy Management

Continue to optimize the cost of maintaining Metropolitan's headquarters building and DVL

Visitors Center while supporting Metropolitan's sustainability initiatives and the guidelines and benchmarks established by the Building Owners and Managers Association.

Begin implementation of findings from an energy management/usage audit of Union Station designed to reduce energy costs and improve operational efficiency.

Continue to partner with Real Property Development and Management to effectively utilize space and to support leasing space for revenue generation.

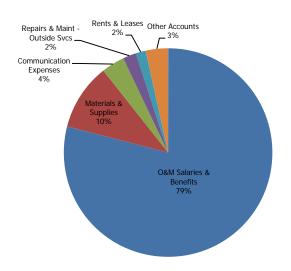
Manage critical rehabilitation projects of Union Station Headquarters as the facility ages beyond 17 years old; repairing and replacing equipment only as required.

O&M FINANCIAL SUMMARY

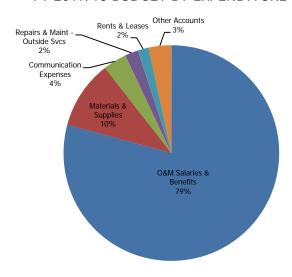
	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	35,763,900	38,773,200	35,956,400	(2,816,800)	36,773,600	817,200
Direct Charges to Capital	(1,304,000)	(966,100)	(1,352,600)	(386,500)	(1,363,100)	(10,500)
O&M Salaries and Benefits	34,459,900	37,807,100	34,603,800	(3,203,300)	35,410,500	806,700
% Change		9.7%		(8.5%)		2.3%
Professional Services	409,600	413,100	490,900	77,800	507,100	16,200
Communication Expenses	1,457,800	1,481,400	1,565,500	84,100	1,565,500	_
Materials and Supplies	4,613,000	4,903,100	4,522,000	(381,100)	4,567,800	45,800
Outside Services - Non Professional / Maintenance	558,000	505,700	455,800	(49,900)	453,800	(2,000)
Rent & Leases	668,400	788,600	696,000	(92,600)	721,000	25,000
Repairs & Maintenance - Outside Services	637,700	936,900	889,500	(47,400)	896,500	7,000
Subsidies & Incentives	511,900	563,200	549,200	(14,000)	549,200	_
Other Accounts	180,400	39,800	15,400	(24,400)	16,400	1,000
Total O&M	43,496,700	47,438,900	43,788,100	(3,650,800)	44,687,800	899,700
% Change		9.1%		(7.7%)		2.1%
Operating Equipment	936,200	764,000	667,200	(65,300)	627,800	(70,900)
Total O&M and Operating Equipment	44,459,900	48,202,900	44,455,300	(3,747,600)	45,315,600	860.300
% Change		8.4%		(7.8%)		1.9%

Note – Totals may not foot due to rounding.

FY 2016/17 BUDGET BY EXPENDITURE

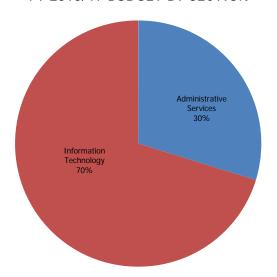


FY 2017/18 BUDGET BY EXPENDITURE

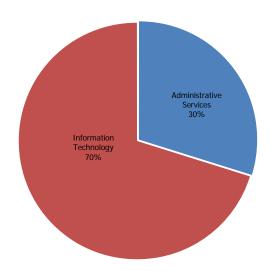


O&M BUDGET BY SECTION

FY 2016/17 BUDGET BY SECTION



FY 2017/18 BUDGET BY SECTION



	2015/16	2015/16 2016/17		2017/18	2017/18 Change from		Personnel Budget			
	Budget	Budget	2015/16	Budget	2016/17	15/16	16/17	17/18		
Office of the Manager	1,660,200	_	(1,660,200)	_	_	7	-	_		
Administrative Services	13,170,200	13,046,200	(124,000)	13,327,900	281,700	76	82	82		
Information Technology	32,608,500	30,741,900	(1,866,600)	31,359,800	617,900	124	123	123		
Total O&M	47,438,900	43,788,100	(3,650,800)	44,687,800	899,700	207	205	205		

Note – Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		196	212	212	_	212	_
	0&M	191	207	205	(2)	205	_
	Capital	5	5	7	2	7	_
Temporary		5	_	2	2	1	(1)
	O&M	5	_	_	_	_	_
	Capital	_	_	2	2	1	(1)
Total Personnel		201	212	214	2	213	(1)
	O&M	196	207	205	(2)	205	_
	Capital	5	5	9	4	8	(1)

Note - Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

At the General Manager's direction, Business Technology has been reorganized.

- The Office of the Manager has been eliminated and all functions with the exception of annexation have been reassigned to other areas within Metropolitan.
- Business Outreach and videography and photography services have been moved to External Affairs
- Facilities management for Union Station and the DVL Visitor Center has been moved to Real Property Development and Management.
- Budgets have been restated to reflect the movement of Business Outreach and Facilities Management.

Business Technology's biennial O&M and Operating Equipment budget is 44.5 million in FY 2016/17 and \$45.3 million in FY 2017/18 or a decrease of 7.8% and a slight increase of 1.9%, respectively from the prior budget years. The decrease is due to the following factors:

- The primary factor, Salary and Benefits, has been reduced as a result of the elimination of a position, the unfunding of nine positions and the anticipated vacancies from retirements and position movements. In addition, resources are anticipated to be shifted to Capital Projects in lieu of the use of consultants. Business Technology is preparing its customers for O&M service delays over this biennium period as workload will be tightly managed and prioritized in order to meet budget reductions.
- Software maintenance costs were eliminated for any new corporate/business applications that have not come online with some costs passed back to the user.
- Lower outside service maintenance costs are expected for IT servers as a result of new servers installed over the past biennium that are under warranty.

The following are the significant changes by budget year.

FY 2016/17

Personnel-related issues

FY 2015/16 budget was not restated to reflect individual position movements related to the reorganization. If those position movements are taken into account total personnel count remains flat with the FY 2015/16 budget.

Salaries and Benefits budget reflects the elimination of one regular position, a transfer of a regular position to Human Resources, nine unfunded positions, and planned vacancies that will negatively impact service levels in the areas of Records Management and Warehouse systems. In the areas of information technology, service level delays and/or reductions are planned for the areas of new mobile technology, software compliance monitoring, database administration

for Oracle Financials, and desktop/helpdesk support.

Salaries and Benefits also reflect negotiated labor increases

Capital labor budget reflects an increase in scheduled demands for ongoing rehabilitation and upgrades of IT facilities in support of the Water System Operations and Engineering Services groups. These include upgrades to the DVL Controls at the Wadsworth Pumping Plant, the Emergency Two-way Radio system, the Water Asset Information System, Water Systems Control Master Plan, Cyber Security Enhancements and the Communications Infrastructure Upgrade.

Professional Services

The budget reflects additional IT support in the areas of video streaming for board and committee rooms and initiatives associated with the ITSP.

Materials and Supplies

The budget reflects reduced levels of software licensing/support agreements as a result of deferred capital projects associated with capital reporting, Enterprise Content Management, and Emergency Radio Communications. Any contractual cost increases of existing software maintenance and licensing will be absorbed.

Outside Services – Non Professional and Repairs/Maintenance

The budget reflects a decrease due to deferral/delays for maintenance of IT Servers and equipment.

Other

The rents and leases budget reflects the current costs for rideshare vehicles and reprographic equipment.

FY 2017/18

Personnel-related issues

Total regular personnel count for both 0&M and capital work remains flat from the FY 2016/17 budget.

Salaries and Benefits reflect the district's overall cost increase for operating expenses of 2.25%.

Operating Equipment – FY 2016/17 and FY 2017/18

The operating equipment budget reflects the critical replacement of IT servers, routers, and storage devices used for Metropolitan applications.

The operating equipment budget is decreasing slightly between budget years FY 2016/17 and FY 2017/18 primarily as a result of fewer IT equipment replacements.

This page intentionally left blank.

HUMAN RESOURCES

Human Resources (HR) strategically, and cost effectively, recruits, retains, motivates, rewards, and develops Metropolitan's employees.

PROGRAMS

The focus of Human Resources is to work closely with management to foster effective people management; prepare for future workforce challenges; partner with customers on people solutions; and provide excellent HR services that ensure compliance to numerous HR laws, regulations, and responsibilities.

HR services include employee and labor relations, recruitment and selection, equal employment opportunity (EEO), benefits, retirement, leave administration, classification and compensation administration, medical screening, workers compensation, training, organizational development, and workforce and career development.

HR accomplishes its mission through the following programs or sections:

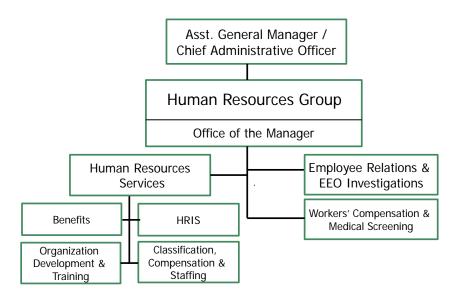
Office of Human Resource Group Manager provides strategic leadership and direction for Metropolitan's Human Resources functions. Organizations reporting directly to it include Employee Relations, Human Resources Services, and Workers' Compensation and Medical Screening.

Employee Relations is responsible for fostering harmonious labor relations between Metropolitan and its four certified bargaining units, and plays a key role in contract negotiations, including working as a partner with senior management in

developing Metropolitan's collective bargaining strategy. The staff also serves as a resource to managers and supervisors on such matters as grievances, disciplinary actions, and workplace conflicts. The section also provides ongoing training to managers on all facets of employeremployee relations.

The section also has responsibility for diversity and inclusion and investigating internal complaints of unlawful discrimination. Diversity and inclusion includes partnering with Employee Resource groups and external affinity groups to outreach to future applicants. EEO investigations staff meet with complainants, interviews witnesses, and issues findings as to whether allegations of unlawful discrimination can be substantiated. This work is critical in ensuring that Metropolitan maintains a workplace free of discrimination and harassment.

Human Resources Services is responsible for the strategic design and implementation of Metropolitan's compensation, benefits, recruitment, training and the Human Resources Information Systems programs. The section leads and participates in continuous process improvement and cost optimization studies for all plans. Responsibilities include job analysis, market assessments, recruitment, active employee and retiree benefit program administration, partnering with management on new initiatives, and implementing new programs and agreements.



GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, HR will focus on the following key issues that support the GM's objective of Employee Development and additional HR priorities:

Ensure Effective People Management

Strong people management skills are essential to meeting Metropolitan's future challenges and successes. HR will ensure that the role of management is defined and that current managers have the tools and training needed to provide effective people management.

A formal, multi-tiered Management and Leadership Development program will help managers better understand their roles and responsibilities as they progress through management.

Learning opportunities will be provided to employees to prepare for future management positions from the entry level manager all the way to the executive level.

Ongoing events, workshops and forums will provide opportunities to deliver consistent expectations and tools for management.

Build Partnerships with HR Customers

Effective people solutions require that HR partner with its customers which includes management, labor, employees, retirees and others. HR must understand the customer's business needs and then build working relationships that develop effective solutions to people-related challenges. This working partnership will minimize misdirected efforts, speed decision-making, reduce rework and, ultimately, produce a better workplace at a reduced cost.

Strengthen HR/customer partnerships and communication to identify areas for improvement in HR products, services, support and messaging.

Ensure Risk Management, Employee Relations, EEO and Legal Department coordinate to avoid unnecessary litigation of liability claims and costeffectively resolve claims that are addressed by these organizations.

Prepare to Meet Challenges of Future Workforce Changes

Based on current workforce demographics, it is a certainty that Metropolitan will face increasing staff turnover over the next decade. This will create opportunities for existing employees and challenges for management. As employees are promoted or hired, management needs to examine opportunities for re-organizing work, restructuring functions, supporting diversity and managing change.

This will include a focus on learning, development, knowledge capture, cross-training opportunities, and building pipelines for future vacancies.

HR will develop new strategies, support existing efforts and ensure Metropolitan remains competitive when compared to other organizations.

HR will support career development activity undertaken by employees to enhance knowledge, skills, and abilities for future work and promotional opportunities, including support of internship and mentoring initiatives.

Provide Excellent Human Resources Services

HR provides a wide range of services and support from pre-hire to retirement and impacts almost every aspect of the organization. To make maximum contribution, all HR functions must serve as trusted advisors that speak with one voice, listen well and provide consistent guidance on people-related matters.

HR will continue to simplify policies, processes, and procedures to reduce the costs of HR administration by utilizing technology, reducing redundancies or implementing new approaches to existing services.

HR will develop standard reports to enhance management access to employee data and assist with decision-making.

HR will administer a full range of benefit services for health, leave, deferred compensation and retirement programs.

HR will continue to review the recruitment process and procedures to improve quality of hire and time-to-fill.

Ensure Compliance with Laws and Regulations

HR manages compliance to four MOUs and the Administrative Code, and addresses many sensitive and confidential personnel issues.

HR will continue to monitor a wide array of changing legal and regulatory requirements while adapting HR processes and systems to conform to these changing requirements.

HR will ensure Metropolitan meets Equal Employment Opportunity requirements and numerous Federal, State, and Local laws and regulations and Public Sector codes and rulings.

HR will maintain fiduciary responsibilities in the management of financial and retirement programs and comply with the Affordable Care Act and with all privacy and data security requirements.

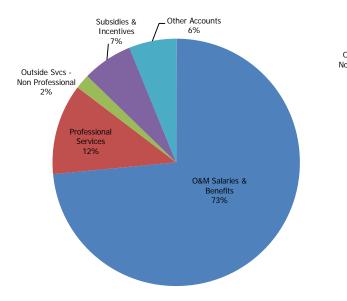
O&M FINANCIAL SUMMARY

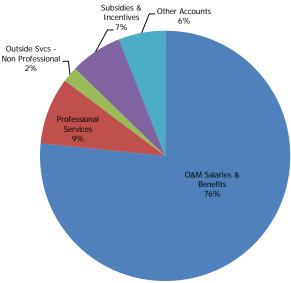
	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	7,460,700	7,469,300	7,613,100	143,800	7,829,300	216,200
Direct Charges to Capital	_	_	_	_	_	_
0&M Salaries and Benefits	7,460,700	7,469,300	7,613,100	143,800	7,829,300	216,200
% Change		0.1%		1.9%		2.8%
Professional Services	712,200	1,029,600	1,231,800	202,200	885,400	(346,400)
Advertising	165,700	165,000	150,000	(15,000)	150,000	_
Outside Services - Non Professional / Maintenance	120,800	277,000	197,000	(80,000)	202,000	5,000
Subsidies & Incentives	955,500	678,800	680,000	1,200	687,300	7,300
Training & Seminars Costs	181,800	130,800	184,200	53,400	158,200	(26,000)
Other Accounts	323,200	287,500	306,100	18,600	309,100	3,000
Total O&M	9,919,900	10,038,000	10,362,200	324,200	10,221,300	(140,900)
% Change		1.2%		3.2%		(1.4%)

Note – Totals may not foot due to rounding.

FY 2016/17 BUDGET BY EXPENDITURE

FY 2017/18 BUDGET BY EXPENDITURE

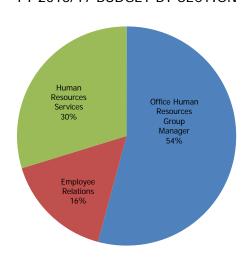


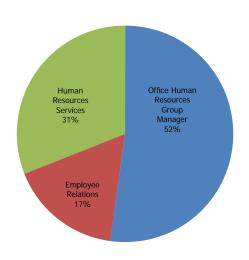


O&M BUDGET BY SECTION

FY 2016/17 BUDGET BY SECTION

FY 2017/18 BUDGET BY SECTION





	2015/16	2015/16 2016/17		2017/18	Change from	Personnel Budget		
	Budget	Budget	2015/16	Budget	2016/17	15/16	16/17	17/18
Office of the Manager	4,879,300	5,617,900	738,600	5,335,300	(282,600)	15	17	17
Employee Relations	1,650,200	1,659,700	9,527	1,717,200	57,500	7	7	7
Human Resources Services	3,508,500	3,084,600	(423,900)	3,168,700	84,200	15	14	14
Total O&M	10,038,000	10,362,200	324,200	10,221,300	(140,900)	37	38	38

Note - Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		36	37	38	1	38	_
	0&M	36	37	38	1	38	_
	Capital	_	_	_	_	_	_
Temporary		2	_	_	_	_	_
	0&M	2	_	_	_	_	_
	Capital	_	_	_	_	_	_
Total Personnel		38	37	38	1	38	_
	0&M	38	37	38	1	38	_
	Capital	_	_	_	_	_	_

Note – Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

HR's Biennial Budget is \$10.4 million in FY 2016/17 and \$10.2 million in FY 2017/18 or an increase of 3.2% and a decrease of 1.4% respectively from the prior budget years. The changes are due primarily to the following factors:

- While professional services increase in the first year to support bargaining unit negotiations, over the biennium professional services decrease by 13%. Based on an assessment of future training needs and priorities more in-house training versus hiring consultants will be done
- Salaries and Benefits increase is due to merit increases, negotiated labor increases and an increase in retirement related benefit costs.
- At the General Manager's direction, budgets were restated to reflect the movement of the Risk Management Unit to the Office of the Chief Financial Officer.

The following are the significant changes by budget year.

FY 2016/17

Personnel-related issues

Personnel count increased by one from FY 15/16 budget for an analyst to support workers compensation and medical screening.

Salaries and Benefits reflect negotiated labor increases offset by hiring replacement employees at lower levels.

Professional Services

The budget reflects services related to bargaining unit negotiations.

Advertising

The budget is anticipated to be lower due to a declining number of recruitments.

FY 2017/18

Personnel-related issues

Personnel count remains flat from FY 16/17.

Salaries and Benefits reflect the district's overall cost increase for operating expenses of 2.25%.

Professional Services

The budget is anticipated to be lower due to the completion of labor negotiations.

This page intentionally left blank.

REAL PROPERTY DEVELOPMENT & MANAGEMENT

The Real Property Development and Management (RPDM) group plans, secures and manages Metropolitan's real property assets, proactively seeking to enhance revenue while ensuring that Metropolitan's core business is protected.

PROGRAMS

The Real Property Development and Management group accomplishes its mission through the following programs or sections:

Office of the Group Manager directs the group's efforts in planning, acquiring, and managing Metropolitan's real property assets; monitors and tracks the group's business plan, financial and budgetary initiatives; and provides administrative and business process support.

The Office of the Group Manager is also responsible for the development of real property policies and strategies.

The Office of the Group Manager includes the Planning & Acquisition unit, the Revenue & Property Management unit, the Facility Management unit and the Business Management - Real Estate Team.

Planning & Acquisition Unit is responsible for the planning and acquisition of property and property rights for O&M and capital projects including the Right of Way and Infrastructure Protection Program, Regional Recycled Water Supply Program, and Bay Delta Initiatives.

Revenue & Property Management Unit strategically seeks to generate supplementary ongoing revenue from Metropolitan's real property assets and handle surplus property dispositions and requests from third parties to use Metropolitan real property through leases, licenses, entry permits, and easements.

Facility Management Unit is responsible for facilities management for Union Station headquarters facility and the DVL Visitor Center

Business Management – Real Estate Team handles property tax and lease payments, contract support, Board letter and report coordination and all other administrative functions related to property acquisition and management.

95



,

GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, RPDM will focus on the following key issues:

Revenue Enhancement Strategies

Continue to implement revenue enhancement strategies and opportunities for Metropolitan real property assets.

Continue to meet and negotiate with State and local agencies and other compatible tenants seeking to lease space at Metropolitan's headquarters building.

Continue review of the comprehensive inventory of Metropolitan-owned real property to identify excess property and consider leasing opportunities based on compatible third-party and secondary-use requests.

Property Management System Improvement

Continue efforts to improve procedures, tools, technologies, and practices for public sector property management in light of current and future trends.

Complete implementation of REPortfolio, the group's new real property management system software.

Real Property Asset Protection & Stewardship

Protect rights-of-way and facilities for optimal operating conditions and promote stewardship and sustainability of real property assets.

Make property tax payments and file possessory tax reports to appropriate counties on time.

Make timely and suitable responses to adjacent projects, land developments, legislation, and environmental proceedings.

Complete annual site inspections of conveyed property.

Improve land security practices to further decrease incidences of trespass.

Revise right-of-way operating policies to reflect contemporary best practices.

Continue efforts to detect and address right-of-way encroachments in a responsible manner.

Monitor compliance with terms of licensing and leasing agreements (e.g., invoicing, insurance coverage, accounts receivable).

Monitor legislation regarding eminent domain, relocation assistance, and public agency real estate acquisition and appraisal practices.

Bay Delta Initiatives Support

Provide property planning, research, and valuation in support of the California Water Fix and Eco Restore efforts.

DVL Management

Continue to manage DVL and explore new marina opportunities, expand lease revenues, and improve trail access and public use.

Property & Right of Way Acquisition

Provide real property and right-of-way acquisition, negotiations, and relocation services for Metropolitan projects.

Conduct real property valuation, feasibility and cost studies for proposed and planned infrastructure and water reliability projects.

Capital Projects Support

Appraise and acquire all permanent and temporary easements for the Right of Way and Infrastructure Protection program.

Prepare a land use study, perform site analysis, and appraise construction areas for the Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation and Replacement program. Acquire temporary easements for construction laydown areas for the Conveyance and Distribution System Rehabilitation program.

Prepare real property feasibility and cost studies for the Regional Recycled Water Supply program.

Facility & Energy Management

Continue to optimize the cost of maintaining Metropolitan's headquarters building and DVL Visitors Center while supporting Metropolitan's sustainability initiatives and the guidelines and benchmarks established by the Building Owners and Managers Association.

Begin implementation of findings from an energy management/usage audit of Union Station designed to reduce energy costs and improve operational efficiency.

Continue to effectively utilize space and to support leasing space for revenue generation.

Manage critical rehabilitation projects of Union Station Headquarters as the facility ages beyond 17 years old; repairing and replacing equipment only as required.

Workforce Development & Succession Planning

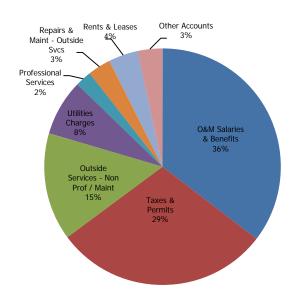
Expand knowledge, skills, and abilities of staff through training, succession planning, and educational workshops.

O&M FINANCIAL SUMMARY

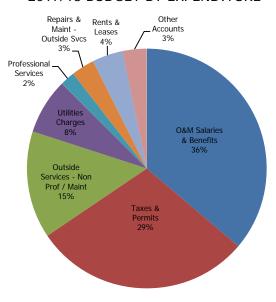
	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	6,212,600	7,264,000	6,854,300	(409,700)	7,121,700	267,400
Direct Charges to Capital	(241,200)	(289,800)	(591,800)	(302,000)	(596,300)	(4,500)
0&M Salaries and Benefits	5,968,300	6,974,200	6,262,500	(711,700)	6,525,400	262,900
% Change		16.9%		(10.2%)		4.2%
Professional Services	321,900	383,600	394,600	11,000	354,600	(40,000)
Outside Services - Non Professional / Maintenance	2,126,900	2,651,300	2,601,200	(50,100)	2,608,500	7,300
Rents & Leases	41,800	37,200	709,200	672,000	749,200	40,000
Repairs & Maintenance - Outside Services	376,800	599,900	558,000	(41,900)	558,000	_
Taxes & Permits	35,700	54,700	5,199,900	5,145,200	5,288,300	88,400
Utilities Charges	1,109,300	1,482,400	1,356,100	(126,300)	1,356,100	
Other Accounts	745,600	786,200	597,800	(188,400)	587,400	(10,400)
Total O&M	10,726,300	12,969,500	17,679,300	4,709,800	18,027,500	348,200
% Change		20.9%		36.3%		2.0%
Operating Equipment	_	_	31,500	31,500	_	_
Total O&M and Operating Equipment	10,726,300	12,969,500	17,710,800	4,741,300	18,027,500	348,200
% Change		20.9%		36.6%		2.0%

Note – Totals may not foot due to rounding.

2016/17 BUDGET BY EXPENDITURE



2017/18 BUDGET BY EXPENDITURE



PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		36	43	39	(4)	39	_
	0&M	34	40	36	(4)	36	_
	Capital	2	3	3	_	3	_
Temporary		1	3	1	(2)	1	_
	0&M	1	3	1	(2)	1	_
	Capital	_	_	_	_	_	_
Total Personnel		37	46	40	(6)	40	_
	0&M	35	43	37	(6)	37	_
	Capital	2	3	3	_	3	_

Note – Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

RPDM's Biennial Budget is \$17.7 million in FY 2016/17 and \$18.0 million in FY 2017/18, an increase of 36.6% and 2.0% respectively from the prior budget years. The Biennial Budget includes property taxes and rents & leases previously budgeted in Other 0&M. Excluding these amounts, RPDM achieved an 8.5% decrease between FY 2015/16 and FY 2016/17 and a slight increase of 1.3% between FY 2016/17 and FY 2017/18. The decrease is due primarily to the following factors:

- A reevaluation and reduction in classifications prior to recruitments for previously vacant positions and the elimination of two district temps. Following reorganization, four regular positions in Facilities management were reassigned to other organizations within Metropolitan.
- A reduction in law enforcement in the DVL recreation area and DVL landscape maintenance services.
- Reduced participation fees for the Western Riverside County Agricultural Coalition, formed to inform
 and educate agricultural producers about regulator issues and to coordinate with county and state
 regulatory agencies.
- Additional maintenance reductions/deferrals for Union Station Headquarters and DVL Facilities are also planned that will negatively affect service levels.
- At the General Manager's direction, budgets have been restated to reflect the movement of Facilities Management Unit from Business Technology to Real Property Development & Management.

The following are the significant changes by budget year.

FY 2016/17

Personnel-related issues

Total personnel count reflects a reduction of four regular positions and two district temps from FY 2015/16. Following reorganization, four regular positions within Facilities Management were subsequently reassigned to other organizations within Metropolitan.

Salaries and Benefits reflect negotiated labor increases offset by hiring replacement employees at lower levels.

The budget reflects an increase in capital labor due to increased support of the Right-of-Way and Infrastructure Protection program, the Prestressed Concrete Cylinder Pipe Rehabilitation and Replacement program, and the Conveyance and Distribution System Rehabilitation program.

Taxes & Permits

The budget reflects property taxes previously budgeted in Other O&M. Property taxes for the PVID land purchase are included.

Rents & Leases

The budget reflects rents & leases previously budgeted in Other O&M.

Utilities Charges

The utilities budget reflects a decrease to align with current usage at Union Station and DVL Facilities along with the assumption of a zero-percent change to utility rates.

Professional and Non Professional Services

The budget reflects an increase in consulting services anticipated for management of the Verbena properties, offset by a reduced need for law enforcement due to lower lake elevations and the resulting decrease in visitors, and a reduced landscape maintenance contract that incorporates a sharing of costs with other property tenants.

The budget also reflects a decrease due to deferral/delays for Union Station and DVL visitor building maintenance and services.

Other

Memberships & Subscriptions budget reduction is a result of reassessed participation fees for the Western Riverside County Agricultural Coalition.

The budget also reflects reductions in janitorial and building maintenance supplies due to deferring building maintenance at Union Station and DVL facilities

FY 2017/18

Personnel-related issues

Personnel count remains flat from FY 2016/17 budget.

Salaries and Benefits reflect the district's overall cost increase for operating expenses of 2.25%.

Professional Services

The budget reflects the reduced need for law enforcement due to lower lake elevations and the resulting decrease in visitors.

Other

The budget reflects an anticipated increase in property taxes and rents and leases.

Operating Equipment – FY 2016/17 and FY 2017/18

FY 2016/17 reflects the replacement of Union Station headquarters equipment at end of life.

OFFICE OF CHIEF FINANCIAL OFFICER

The Office of the Chief Financial Officer (CFO) provides innovative, proactive, and strategic financial direction in support of the mission of Metropolitan, the Board of Directors, management, and employees.

PROGRAMS

The Office of the Chief Financial Officer is responsible for maintaining Metropolitan's strong financial position and high credit ratings and helping to achieve equitable water rates and charges that generate sufficient revenues.

In addition, the Office of the CFO assists in the efficient management of Metropolitan's financial resources, and ensures that adequate financial controls are in place to accurately record financial transactions, communicate financial results, and protect Metropolitan's assets.

The Office of the CFO accomplishes its mission through the following programs or sections:

Chief Financial Officer is responsible for the overall administration of finance and accounting functions for Metropolitan including debt and investment management; financial planning and analysis including rate setting and budgeting; accounting and control including financial reporting, payroll, accounts payable, accounts receivable; and risk management and business continuity.

The business continuity program ensures that Metropolitan takes the necessary steps to identify the impacts of potential losses and maintain viable recovery strategies, recovery plans, and continuity of operations.

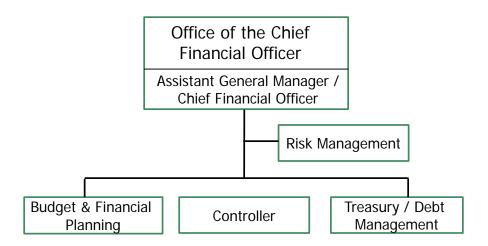
Risk Management Unit which reports directly to the Chief Financial Officer section involves

managing all aspects of Metropolitan's casualty insurance and risk management programs to minimize exposure to loss.

Budget and Financial Planning is responsible for Metropolitan's Biennial Budget, revenue requirements, and rates and charges recommendations; cost monitoring and analysis; short and long term financial analysis; planning and financial modeling; the water standby charge program; and the annual tax levy and annexation fee calculations.

Controller is responsible for maintaining internal controls that safeguard Metropolitan's assets, as well as recording and maintaining its official accounting records via the billing, accounts payable, payroll, and financial reporting functions.

Treasury/Debt Management is responsible for Metropolitan's investment and treasury obligations including receipt, safekeeping, and disbursement of Metropolitan's funds; preparation of security sales documents; and all commercial banking activities, including all payment processing, including but not limited to wires, checks, and automatic deposits; and administration of debt obligations including all issuance of bonds, and investor and bond rating agency relations.



GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, the Office of the CFO will focus on the following key issues:

Cost of Service

Complete the annual cost-of-service analysis for rates and charges for calendar year 2017 and 2018.

Financial Forecasts and Analysis

Provide an updated 10-year financial forecast in the Biennial Budget.

Continue to provide the Board with various analyses to manage financial performance for long-term rate stability, given the future potential implementation of BDCP/CA WaterFix.

Analyze the underfunding of financial obligations that have accrued over the past several years.

Annexation/Tax Levy

Complete the annual annexation calculation and tax levy assessment.

Rates and Charges

Manage and effectively administer rates and charges to recover costs consistent with Board policy and objectives.

Financial Reporting/Internal Controls

Continue to record and report the financial activities of Metropolitan in a timely and transparent manner to the Board and member agencies.

Continue to ensure that internal controls are in place to provide assurance that assets are safeguarded and financial information is fairly stated.

Continue to improve communications of financial information to the Board, member agencies, management, and the financial community.

Work with each section within the Office of the CFO to establish staff back-up responsibilities for various work processes.

Capital Financing

Update capital financing plans and work with rating agencies and investors to communicate financial needs and capabilities, ensure cost-effective access to capital markets, and maintain long-term bond ratings of AA or better.

Work with Metropolitan's underwriting team, financial advisors, and swap advisors to identify financing opportunities to prudently manage the overall cost of financing Metropolitan's capital investment program.

Manage investor relations to ensure clear communications, accuracy of information, and integrity.

Continue to manage debt service to mitigate the volatility of debt service payments over time and reduce debt service costs through re-financings and the prudent use of interest rate swaps, in accordance with Metropolitan's interest rate swap policy.

Maintain relationships with the financial community and bond rating agencies to maintain Metropolitan's high credit ratings and access to various aspects of the financial markets to maximize financial flexibility.

Investment

Prudently invest Metropolitan's funds with the objective of safety of principal, liquidity, and yield.

Manage the short term portfolio to provide the necessary liquidity to fund in excess of \$3.0 billion over the biennium in expenditures for Operations and Maintenance, debt service, and construction projects.

Measure the performance of the short-term portfolio, and manage the portfolio to meet or exceed the short-term benchmark consistent within established investment codes and policy.

Manage outside portfolio managers to ensure compliance with Metropolitan's investment policy, and to monitor investment performance.

Risk Management

Continue to effectively manage Metropolitan's casualty insurance and risk management programs to minimize exposure to loss.

Business Continuity

Refine the Business Continuity Plan and Program in accordance with the results of the Business Impact Analysis and internal audit recommendations. Conduct a Risk Assessment and implement an annual Business Continuity

Plan update cycle utilizing the new Business Continuity Program Management System developed in the Fusion Framework system. Work with IT Disaster Recovery to identify actions required to meet the recovery requirements identified in the Business Impact Analysis and conduct exercises to test the program's capabilities to recover Metropolitan's business functions in the event of a significant regional disaster.

Workforce Development & Succession Planning

Continue to examine and consider the challenges associated with succession planning and future staffing requirements in light of the composition and age of the workforce.

Continue to develop and offer classes in the Finance Academy to foster employee development.

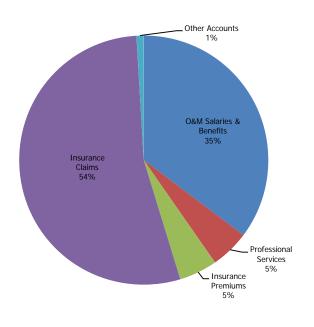
O&M FINANCIAL SUMMARY

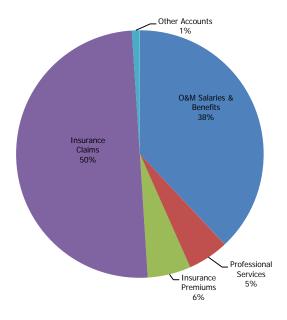
	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	8,845,300	9,389,200	8,582,600	(806,600)	8,770,400	187.800
Direct Charges to Capital	(113,600)	(157,600)	_	157,600	_	_
O&M Salaries and Benefits	8,731,700	9,231,600	8,582,600	(649,000)	8,770,400	187,800
% Change		5.7%		(7.0%)		2.2%
Professional Services	1,036,300	1,234,400	1,227,900	(6,500)	1,234,100	6,200
Insurance Premiums	1,122,400	1,300,000	1,200,000	(100,000)	1,300,000	100,000
Insurance Claims			13,090,500	13,090,500	11,537,300	(1,553,200)
Other Accounts	261,300	223,400	226,900	3,500	240,600	13,700
Total O&M	11,151,700	11,989,400	24,327,900	12,338,500	23,082,400	(1,245,500)
% Change		7.5%		102.9%		(5.1%)

Note – Totals may not foot due to rounding.

FY 2016/17 BUDGET BY EXPENDITURE

FY 2017/18 BUDGET BY EXPENDITURE



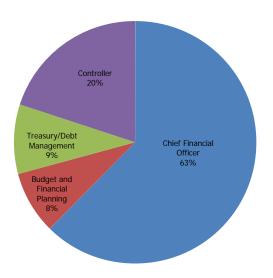


O&M BUDGET BY SECTION

FY 2016/17 BUDGET BY SECTION

Controller 18% Treasury/Debt Management 9% Chief Financial Officer 65% Planning 8%

FY 2017/18 BUDGET BY SECTION



	2015/16	2016/17	Change from	2017/18	Change from	Per	sonnel B	udget
	Budget	Budget	2015/16	Budget	2016/17	15/16	16/17	17/18
Chief Financial Officer	3,252,900	15,819,700	12,566,800	14,403,300	(1,416,400)	7	6	6
Budget and Financial Planning	1,969,000	1,899,400	(69,700)	1,931,800	32,400	8	8	8
Controller	4,424,900	4,496,500	71,600	4,602,700	106,300	26	28	28
Treasury/Debt Management	2,342,600	2,112,400	(230,200)	2,144,500	32,100	7	7	7
Total O&M	11,989,400	24,327,900	12,338,500	23,082,300	(1,245,600)	48	49	49

Note - Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		45	50	49	(1)	49	_
	0&M	45	48	49	1	49	_
	Capital	1	2	_	(2)	_	_
Temporary		1	_	_	_	_	_
	0&M	1	_	_	_	_	_
	Capital	_	_	_	_	_	_
Total Personnel		46	50	49	(1)	49	_
	0&M	45	48	49	1	49	_
	Capital	1	2	_	(2)	_	_

Note – Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Office of the CFO's Biennial Budget is \$24.3 million in FY 2016/17 and \$23.1 million in FY 2017/18 or an increase of 102.9% and a decrease of 5.1% respectively from the prior budget years. The Biennial Budget includes insurance premiums and claims previously budgeted in Other O&M. Excluding insurance, the CFO budget decreased 6.1% between FY 2015/16 and FY 2016/17 and increased 2.0% between FY 2016/17 and FY 2017/18. The change is primarily due to the following factors:

- Salaries and benefits have been reduced by 5.0% over the biennium as a result of three positions being unfunded and several position classifications being downgraded.
- Professional Services and other non-labor costs excluding insurance increased by only 1.2% over the biennium.
- At the General Manager's direction, budgets were restated to reflect the movement of the Risk Management Unit from Human Resources to the Office of the CFO.

The following are the significant changes by budget year.

FY 2016/17

Personnel-related issues

Total personnel count decreases by one to reflect the reassignment of a position in Risk Management following the reorganization. Five positions have been eliminated through the last several budget cycles. In addition, three positions have been unfunded and several position classifications have been downgraded over the biennium.

Salaries and Benefits reflect negotiated labor increases.

The budget also reflects a decrease in capital labor following the completion of the Oracle upgrade.

Insurance Premiums

Insurance premiums previously budgeted in Other 0&M are anticipated to remain lower in 2016/17 based on 2015/16 negotiated rates.

Insurance Claims

Third party liability claims were previously budgeted in Other O&M.

FY 2017/18

Personnel-related issues

Total personnel count remains flat from the FY 2016/17 budget.

Salaries and Benefits reflect the district's overall cost increase for operating expenses of 2.25%.

Insurance Premiums

The budget reflects anticipated increases in 2016/17 rates.

Insurance Claims

Third party liability claims budget reflects an anticipated reduction in litigation costs.

.

This page intentionally left blank.

EXTERNAL AFFAIRS

External Affairs is charged with working with state and federal legislators to enhance and protect the operational interests of Metropolitan and its member agencies.

PROGRAMS

External Affairs is responsible for advancing Metropolitan's policy objectives and communicating with external audiences on its behalf. Because Metropolitan's water supplies and operations are influenced significantly by state, federal and even international policy, External Affairs manages strategic offices in Sacramento, Washington, D.C. and San Diego, and conducts its core business at the Union Station headquarters. Personnel in External Affairs' remote offices execute Metropolitan's state and federal legislative advocacy, provide strategic counsel and extend community outreach to these regions. Personnel at the Union Station office give voice to Metropolitan's policy priorities and project initiatives through external communications, regional outreach and educational initiatives in support of the General Manager's Business Plan.

Office of Group Manager oversees the Legislative Services, Conservation & Community Services, Media & Communications Sections, Customer Services Unit and the Business Management Team. The Group Manager directs the activities of the group, establishes the communication plans, and manages and deploys resources in support of Metropolitan's policy objectives in coordination with the board, executive management and other groups in the organization.

Business Outreach Team which reports directly to the Office of Group Manager seeks to advance Metropolitan's policy to actively encourage participation in the solicitation and procurement of all construction contracts, professional service contracts, equipment, and other materials and supplies by all individuals and

businesses, including but not limited to small, local owned, women-owned, minority-owned, and veteran and economically disadvantaged business enterprises.

Customer Services Unit which reports directly to the Group Manager, provides support services to member agencies; manages outreach efforts regarding Metropolitan's facility operations, construction activities, conservation and other water resource initiatives; works with and supports member agencies, local government and the community-at-large; provides staff support for the Agriculture and Industry Relations Committee; and directs research efforts to support External Affairs programs.

Inspection Trip Team which reports directly to the Customer Services Unit conducts field inspection trips to Metropolitan and related facilities for the purpose of providing business and community leaders with firsthand knowledge of Metropolitan's operations.

Media & Communications develops, coordinates and communicates messages, information and achievements to support Metropolitan's key objectives and programs. The section is responsible for strategic communications planning, handling media inquiries and press conferences; developing news releases, videos, fact sheets, talking points, brochures and opinion pieces; and managing Metropolitan's websites, e-newsletters, blogs and its growing presence on social media platforms.

Conservation and Community Services advances public awareness through advertising,

education and community outreach. The Community Programs Unit coordinates and manages Metropolitan's sponsorships for education and research programs, exhibits, water forums, events, and community memberships. The Education Unit develops and distributes printed and online materials to support a comprehensive, standards-based water education curriculum and oversees programs that support Metropolitan's initiatives for students and teaching staff in elementary and secondary schools, colleges and universities.

Legislative Services promotes and protects the interests of Metropolitan and its member agencies before executive, legislative, and regulatory agencies of the state and federal governments. The section advances Metropolitan's policy objectives and board-adopted legislative priorities with legislators and other water policymakers to meet Metropolitan's legislative and regulatory objectives, and supports an effective and growing outreach program with member agencies and other stakeholders to mobilize and sustain support for legislative and regulatory policies.



GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, External Affairs will continue to focus on the following key issues and objectives:

Legislative Policy Objectives

Work with the board, member agencies and executive management to secure support for and/or sponsor federal and state legislation and regulatory policies that advance Metropolitan's policy objectives, including strategic water quality and supply initiatives, conservation and drought responses, Delta solutions, regional water resources projects, and sustainable water and energy management.

Conduct briefings, presentations, and inspection trips for elected officials, government leaders and environmental and business organizations to inform about the impacts of legislative and regulatory policies on Metropolitan operations and the overall management of water programs, policies and sustainability initiatives throughout Southern California.

Communication and Outreach Efforts

Develop and implement strategic, creative and well-coordinated communication plans to inform the public, businesses, environmental and other stakeholder groups about Metropolitan's important role and leadership to ensure safe, reliable water supplies now and into the future through its operations, policies, objectives, and programs.

Expand public outreach efforts to disseminate information on Metropolitan and its programs, policies and objectives through broad-based direct contact with the news media and through production of publications, videos, social media/Internet platforms and the Your Water e-newsletter that inform and educate. Continue to develop and utilize cost-effective social, digital and online platforms to provide information to target audiences and engage with stakeholders.

Strengthen the Community Partnering Program's capacity to enhance communication and information sharing with community leaders,

stakeholder groups and the public on water issues and stewardship in communities throughout Southern California.

Water Supply Reliability, Conservation and Sustainability

Develop and implement paid advertising and other effective outreach campaigns using available resources for multi-cultural and multi-media communications efforts that increase public awareness of drought and water supply conditions and support for long-term conservation strategies.

Provide communication support for Metropolitan programs and projects that ensure water supply reliability including existing water operations, imported supplies from the Colorado River and State Water Project, local resource programs that diversify the region's water portfolio, expanded conservation actions and innovative water supply technologies.

Increase awareness of Metropolitan's longstanding efforts to promote environmental stewardship through its actions and investments for projects, programs, research, and collaboration that protect, restore and enhance habitat, ecosystems, watersheds, and water quality.

Bay Delta Initiatives

Provide information and secure support of stakeholders, the public and legislators for Metropolitan's positions on policies that promote water supply reliability and an environmentally sustainable Bay-Delta. This includes programs and policies related to the California WaterFix and EcoRestore.

Member Agency Support

Facilitate ongoing communication and coordination between Metropolitan and its member agencies through regular meetings of general managers, legislative and education coordinators and public information officers.

Respond promptly to member agency requests regarding Metropolitan's services and infrastructure, conservation, environmental and legislative issues, and public outreach.

Engage in research and related activities that provide accurate and timely information on public opinions, consumer/customer attitudes and awareness to help inform future outreach activities with member agencies, stakeholders and the public.

Board and Committee Activities

Provide primary support to the Communications and Legislation Committee and the Agriculture and Industry Relations Committee, and ensure that committee presentations, board letters and associated activities such as inspection trips and community events provide timely, accurate, important information on programs, trends and activities that can help inform board actions and ensure transparency.

Engage in research and related activities that provide accurate and timely information on public opinions, consumer/customer attitudes and awareness to help inform future outreach activities with member agencies, stakeholders and the public.

Business Outreach

Continue to maintain an effective Business Outreach Program for regional, small businesses, and veterans to ensure broad participation and competitive costs while achieving board-adopted goals of 25% or better for contracting dollars to small business.

Continue to participate as a host of the Annual California Construction Expo where Metropolitan and other state agencies present public works construction opportunities to contractors and suppliers.

Continue to partner with member agencies in hosting "Connect 2 Met" business opportunity

forums in order to educate local business on how to conduct business with public agencies and their purchasing departments.

Continue collaboration with member agencies, water agencies, and Isle Utilities to maintain a Technology Approval group to identify, develop, and commercialize emerging water technologies. The goal is to advance public water agencies' role in the development of water and power related technologies.

Educational Programs

Continue to update and expand distribution of Metropolitan's comprehensive K-12 water education curriculum that meets state standards for each grade level in the areas of science, math, language arts and social studies.

In coordination with member agencies and the educational community, advance the use of online services and new technologies to reach more students, teachers and classrooms including underserved and culturally diverse populations. Explore opportunities to expand services for all educational levels in traditional classrooms, homeschool and online education services, and after school programs.

Continue support for Metropolitan's unique educational programs including Solar Cup, World Water Forum and the Student Art Contest.

Emergency Management and Crisis Communication

Support Metropolitan's emergency preparedness with a responsive, updated crisis communications plan and trained staff for emergency response.

Expand capabilities of social media and other communications technologies to provide essential services to Metropolitan staff and the public during times of emergency and in response to natural and man-made disasters.

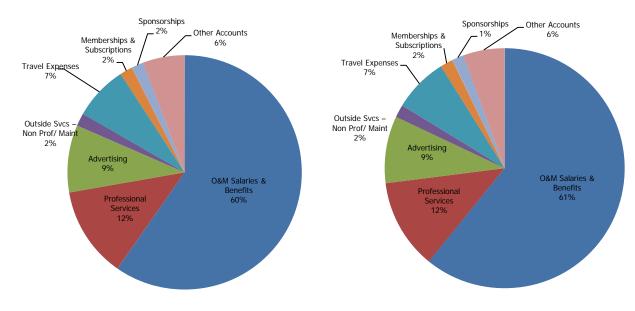
O&M FINANCIAL SUMMARY

	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	12,533,400	13,816,800	14,170,400	353,600	14,816,600	646,200
Direct Charges to Capital	_	_	_	_	_	_
O&M Salaries and Benefits	12,533,400	13,816,800	14,170,400	353,600	14,816,600	646,200
% Change		10.2%		2.6%		4.6%
Professional Services	2,349,200	2,904,700	2,976,700	72,000	2,946,700	(30,000)
Advertising	1,539,600	3,164,600	2,200,000	(964,600)	2,200,000	_
Memberships & Subscriptions	425,100	422,100	418,600	(3,500)	418,600	_
Outside Services - Non Professional / Maintenance	504,800	576,500	546,000	(30,500)	525,000	(21,000)
Sponsorships	282,700	282,000	391,300	109,300	386,300	(5,000)
Travel Expenses	1,292,500	1,623,100	1,787,900	164,800	1,787,900	_
Other Accounts	1,053,900	1,462,200	1,242,100	(220,100)	1,254,100	12,000
Total O&M	19,980,900	24,252,000	23,733,000	(519,000)	24,335,100	602,200
% Change		21.4%		(2.1%)		2.5%

Note – Totals may not foot due to rounding.

FY 2016/17 BUDGET BY EXPENDITURE

FY 2017/18 BUDGET BY EXPENDITURE

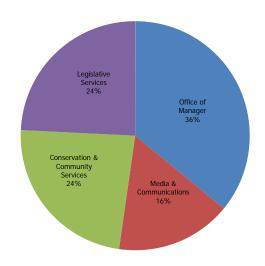


O&M BUDGET BY SECTION

FY 2016/17 BUDGET BY SECTION

Legislative Services 24% Office of Manager 36% Conservation & Community Services 24% Media & Communications 16%

FY 2017/18 BUDGET BY SECTION



	2015/16	2016/17	Change from	2017/18	Change from	Pers	onnel Bu	dget
	Budget	Budget	2015/16	Budget	2016/17	15/16	16/17	17/18
Office of Manager	8,344,800	8,466,800	122,000	8,744,600	277,800	27	27	27
Media & Communications	3,385,400	3,911,100	525,700	3,969,300	58,200	15	19	18
Conservation and Community Services	6,920,000	5,616,000	(1,303,900)	5,728,000	112,000	11	11	11
Legislative Services	5,601,800	5,739,000	137,200	5,893,200	154,200	14	14	14
Total O&M	24,252,000	23,733,000	(519,000)	24,335,100	602,200	67	71	70

Note – Totals may not foot due to rounding.

PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		59	67	70	3	70	_
	0&M	59	67	70	3	70	_
	Capital	_	_	_	_	_	_
Temporary		1	_	1	1	_	(1)
	0&M	1	_	1	1	_	(1)
	Capital	_	_	_	_	_	_
Total Personnel		60	67	71	4	70	(1)
	0&M	60	67	71	4	70	(1)
	Capital	_	_	_	_	_	_

Note – Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

External Affairs' Biennial Budget is \$23.7 million in FY 2016/17 and \$24.3 million in FY 2017/18 or a decrease of 2.1% and an increase of 2.0%, respectively from the prior budget years. In an effort to achieve budget savings, advertising and outreach efforts have been reexamined with the following impacts:

- Advertising: In FY 2014/15 and 2015/16, the board authorized a \$5.5 million multi-media and multi-lingual advertising and outreach campaign to promote greater awareness of water conditions and conservation activities. With the currently proposed funding for the next two fiscal years, a limited advertising campaign using social and digital media, radio and some outdoor advertising could be implemented. To run a full-scale advertising campaign on drought response or other important water management issues, board authorization and additional funding will be necessary in FY 2016/17 and FY 2017/18.
- Capital Projects Outreach: Communications and public outreach support for capital improvements and other major operational and policy initiatives, including the Regional Recycled Water Supply program and refurbishment of existing infrastructure such as the Second Lower Feeder and other pipe rehabilitation projects will require funding from the capital projects.
- Diamond Valley Lake: External Affairs inherited the responsibility for the exhibits and education materials at the DVL Visitors Center without an O&M budget and the exhibits have fallen into disrepair. To update and maintain the exhibits at DVL Visitors Center at a level of quality consistent with Metropolitan's standards and provide information that engages audiences to discover more about the history and future of water management in Southern California, new funding will be required in future budgets for the visitor center and activities in the community.
- At the General Manager's direction, budgets were restated to reflect the movement of the Inspection trip Team and the Business Outreach Team to External Affairs.

The following are the significant changes by budget year:

FY 2016/17

Personnel-related issues

FY 2015/16 budget was not restated to reflect individual position movements (i.e., videographers) related to the reorganization. If those position movements are taken into account total personnel count remains flat with the FY 2015/16 budget.

The budget for Salary and Benefits reflects negotiated labor increases somewhat offset by anticipated vacancies from retirements and unfilled positions.

Other

The budget reflects reductions in funding for materials and supplies, advertising, nonprofessional and graphics to achieve budget savings. These changes have been carefully evaluated to ensure External Affairs will be able to successfully carry out its core mission and objectives in these areas effectively and efficiently.

The budget identifies and redirects existing funding for new research and related activities that provide accurate and timely information on public opinions, consumer/customer attitudes and awareness to help inform future outreach activities with member agencies, stakeholders and the public.

FY2017/18

Personnel-related issues

Total Personnel count remains flat with the FY 2016/17 budget. Salaries and Benefits reflect the district's overall cost increase for operating expenses of 2.25%.

This page intentionally left blank.

GENERAL COUNSEL DEPARTMENT

The Legal Department provides a full range of legal services in a professional, timely, cost-effective, and creative manner.

PROGRAMS

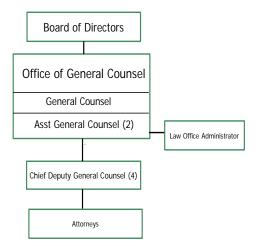
The General Counsel is the chief legal spokesperson for Metropolitan and the Board of Directors and oversees the Legal Department's administrative functions.

The General Counsel represents Metropolitan in litigation and other proceedings to which Metropolitan is a party; provides legal advice to the Board, its committees, and to Metropolitan's staff; drafts, reviews, and negotiates contracts, documents, and other agreements; consults with representatives of other public and private entities on matters of mutual concern; and monitors and analyzes pending and enacted legislations and, when appropriate, drafts legislative recommendations.

The Office of the General Counsel provides legal services to the Board, its committees, and to Metropolitan staff in the following areas:

- Represents Metropolitan interests relating to water supply matters, including Bay Delta resources, Colorado River supply, the State Water Contract, groundwater and water transfer issues, California Environmental Quality Act and Endangered Species Act issues, energy issues, and water delivery and treatment.
- Represents Metropolitan's interest with regard to claims and litigation by or against Metropolitan.

- Provides legal advice with respect to the acquisition, management, and disposal of Metropolitan property and the administration of annexations, and provides legal assistance in Metropolitan's procurement and construction contract programs.
- Provides legal advice with respect to Metropolitan's financial activities, including Metropolitan's rates and charges, taxation, bond issuance, legality of investments, and fiscal administration.
- Provides legal advice related to labor and personnel matters.
- Reviews, analyzes, and monitors pending state and federal legislation and drafts legislative recommendations.



GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, the Office of the General Counsel will focus on the following key issues:

Water Supply Reliability

Pursue a comprehensive legal strategy that proactively addresses legal issues associated with the comprehensive solutions in the proposed California WaterFix while vigorously asserting and defending Metropolitan's interest in litigation and administrative proceedings.

Provide legal advice in support of the development of the California WaterFix and the California EcoRestore, including Delta conveyance options, and the associated environmental documentation and implementing agreements in a manner supportive of Metropolitan's goals and objectives.

Represent Metropolitan, as a separate party or working through the State Water Contractors, in litigation and regulatory proceedings relating to operation of the State Water Project (SWP), water diversions in and affecting the Delta or SWP supplies, construction of new conveyance facilities, and other matters relating to the Delta.

Provide legal advice regarding implementation, financing, and governance of a Delta conveyance system and any resulting amendments to Metropolitan's long-term water supply contract with the Department of Water Resources.

Provide legal advice and support relative to water supply, delivery and water quality issues resulting from the drought and the reduced allocation from the SWP. Provide legal advice and support for initiatives to address the proclaimed emergency due to drought conditions. Provide legal advice and support for proposed water transfers and exchanges and development of local resources, desalination and conservation projects and programs. Provide legal advice and support with respect to implementation of Metropolitan's Water Supply Allocation Plan, water delivery and other issues related to drought conditions. Provide legal support for capital projects required

to provide additional flexibility in the operation of Metropolitan's distribution system.

Provide legal advice and support for update and implementation of Metropolitan's Integrated Water Resources Plan Update and Urban Water Management Plan, including development of the Long-Term Conservation Plan and resource programs to assist the region in meeting the goal of reducing retail water consumption by 20 percent by the year 2020.

Provide legal advice and support in connection with the proposed extension and amendment of the State Water Contract (SWC) and preparation of supporting environmental documents under the California Environmental Quality Act (CEQA) and any separate amendment of the SWC relating to the development and operation of new or additional conveyance facilities.

Continue to defend and enforce the terms of the Quantification Settlement Agreement and related agreements among the participating agencies and other agencies with Colorado River contracts.

Assist in developing, negotiating and documenting new water conservation and augmentation projects to address the long-term supply and demand issues identified in the Bureau of Reclamation's 2012 Colorado River Basin Water Supply and Demand Study.

Provide legal support for Metropolitan's efforts to protect and make optimal use of its Colorado River rights and related water transfer, storage, and exchange programs. Provide legal support for initiatives to identify and obtain new water supplies on the Colorado River, and to protect existing Colorado River water supplies against erosion by unlawful or unreasonable uses.

Finance

Provide legal advice regarding adoption of rates and charges. Continue to defend Metropolitan against challenges to its rate structure.

Provide legal advice and assist with amendments to existing bond resolutions and the development of a subordinate lien bond resolution.

Operations

Negotiate and prepare service connection agreements for new or modified member agency connections. Provide legal assistance on regulatory and real estate issues, including CEQA issues, arising from service connection requests.

District Governance

Continue to provide timely advice to the board and committees on governance and legal compliance matters.

Serve as the point of contact and coordinate Metropolitan responses to Public Records Act requests (PRAs).

Corporate Resources/District Infrastructure

Provide legal support for capital investment and repair and replacement plans, including professional services and procurement contracts.

Provide legal support for environmental analysis under CEQA of Metropolitan's projects and other discretionary actions, in addition to analyzing potential environmental impacts of other agencies' projects on Metropolitan properties and facilities.

Workforce /Human Resources

Provide proactive counsel and advice on workforce issues.

Continue to defend Metropolitan in PERB matters, as well as grievance and disciplinary matters.

Real Property

Assist Real Property Development and Management group (RPDM) in the negotiation and documentation of real property acquisitions and the surplusing of real property. Negotiate and provide legal support for the lease and licensing of Metropolitan property. Provide legal support for the grant and acceptance of easements and entry permits.

Support the expanded work efforts of RPDM.

Technology

Work with the Business Technology Group, Human Resources and External Affairs on social media policies.

Energy Costs and Management

Assist with implementation of the Energy Management Plan, including providing advice on wholesale energy transactions, renewable energy projects and energy-related contracts and legislation.

Provide legal support to ensure that SWP energy needs are met in a cost-effective and sustainable manner.

Legal Department Administration

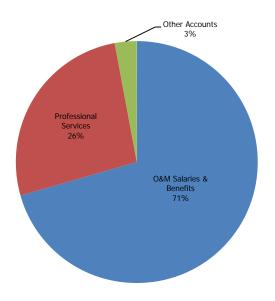
Continue to aggressively manage outside counsel costs, while obtaining effective representation to protect Metropolitan's interests. Continue to work with IT staff on implementation of the electronic discovery management system to enable Metropolitan's Legal and IT staff to more effectively and efficiently respond to litigation and PRAs.

O&M FINANCIAL SUMMARY

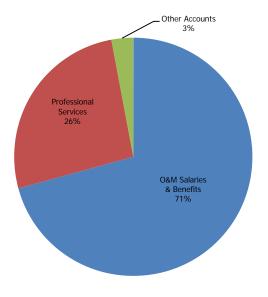
	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	8,900,800	9,195,500	9,545,800	350,300	9,744,000	198,200
Direct Charges to Capital	_	_	_	_	_	_
O&M Salaries and Benefits	8,900,800	9,195,500	9,545,800	350,300	9,744,000	198,200
% Change		3.3%		3.8%		2.1%
Professional Services	1,082,300	3,620,000	3,588,400	(31,600)	3,625,000	36,600
Materials and Supplies	28,000	60,000	50,000	(10,000)	50,000	_
Memberships & Subscriptions	95,100	110,000	100,000	(10,000)	100,000	_
Outside Services - Non Professional / Maintenance	24,900	40,000	30,000	(10,000)	30,000	_
Rent & Leases	14,800	20,000	20,000	_	20,000	_
Subsidies & Incentives	51,000	55,000	55,000	_	55,000	_
Travel Expenses	105,700	90,000	110,000	20,000	120,000	10,000
Other Accounts	16,400	38,000	33,000	(5,000)	33,000	_
Total O&M	10,319,000	13,228,500	13,532,200	303,700	13,777,000	244,800
% Change		28.2%		2.3%		1.8%

Note – Totals may not foot due to rounding.

2016/17 BUDGET BY EXPENDITURE



2017/18 BUDGET BY EXPENDITURE



PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		34	36	36	_	36	_
	0&M	34	36	36	_	36	_
	Capital	_	_	_	_	_	_
Temporary		1	2	2	_	2	_
	0&M	1	2	2	_	2	_
	Capital	_	<u> </u>	_	_	_	_
Total Personnel		35	38	38	_	38	_
	0&M	35	38	38	_	38	_
	Capital	_	_	_	_	_	_

Note – Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Office of the General Counsel's Biennial Budget is \$13.5 million in FY 2016/17 and \$13.8 million in FY 2017/18 or an increase of 2.3% and 1.8% respectively from the prior budget years. The increase is primarily due to the following factors:

- Professional services costs increase reflects anticipated expenses for Bay Delta legal costs, water quality litigation, employment litigation and water rates litigation.
- Salaries and Benefits costs were impacted by negotiated labor increases, merit increases for qualified employees and in the second year by an overall cost increase for operating expenses of 2.25%.

This page intentionally left blank.

GENERAL AUDITOR DEPARTMENT

The Audit Department provides independent, professional, and objective assurance and consulting services designed to add value to and improve Metropolitan's operations.

PROGRAMS

The Audit Department helps the organization accomplish its objectives by using a proactive, systematic approach to evaluate and improve the effectiveness of risk management, control, and governance processes.

The scope of work of the Audit Department is to determine whether Metropolitan's network of risk management, internal control, and governance processes, as designed and represented by management, is adequate and functioning in a manner to ensure:

- Risks are appropriately identified, managed, and monitored
- Significant financial, managerial, and operating information is accurate, reliable, and timely
- Employees' actions are in compliance with policies, standards, procedures, and applicable laws and regulations
- Resources are acquired economically, used efficiently, and protected adequately
- Programs, plans, and objectives are achieved

- Quality and continuous improvement are fostered in the organization's control processes
- Significant legislative or regulatory issues impacting the organization are recognized and addressed appropriately

Opportunities for strengthening internal controls, improving efficiency, and protecting the organization's image may be identified during audits. They will be communicated to the appropriate level of management.



GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, the Audit Department will focus on the following key issues:

Risk Analysis, Risk Mitigation and Internal Controls

Provide risk perspective and auditing advice and counsel to the Board and management in operational and financial activities.

Publish risk-focused audit reports designed to clearly communicate the General Auditor's opinion regarding the internal control structure, significant control issues, and recommendations to mitigate noted risk.

Improve the completion time for audits and evaluate the adequacy and timeliness of management's responses to, and corrective actions taken on, all significant control issues noted in audit reports.

Emphasize test work of significant projects.

Workforce Development

Encourage training opportunities for Audit Department staff to enhance competencies in risk assessment and broaden knowledge of Metropolitan operations. Utilize this knowledge in fine-tuning the Annual Audit Risk Assessment and Audit Plan.

Management and Leadership

Efficiently manage the department's budget for maximum effectiveness of state budgetary objectives.

Uphold the mission, roles, and responsibilities of the Audit Department.

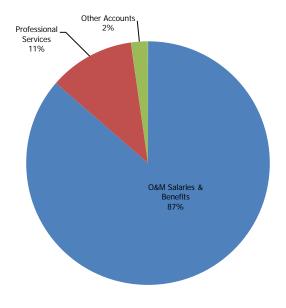
O&M FINANCIAL SUMMARY

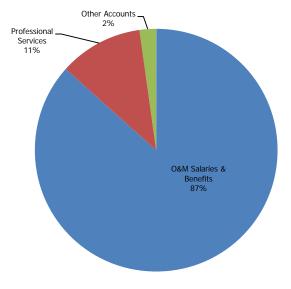
	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	2,247,500	2,652,500	2,665,300	12,800	2,721,300	56,000
Direct Charges to Capital	_	_	_	_	_	_
O&M Salaries and Benefits	2,247,500	2,652,500	2,665,300	12,800	2,721,300	56,000
% Change		18.0%		0.5%		2.1%
Professional Services	305,000	350,000	350,000	_	350,000	_
Materials and Supplies	13,400	14,500	15,000	500	15,000	_
Memberships & Subscriptions	4,200	5,500	5,500	_	5,500	_
Rent & Leases	3,200	5,500	5,500	_	5,500	_
Subsidies & Incentives	9,500	15,000	15,000	_	15,000	_
Training & Seminars Costs	5,600	14,500	15,000	500	15,000	_
Travel Expenses	1,000	5,000	5,000	_	5,000	_
Other Accounts	5,300	9,500	8,500	(1,000)	8,500	_
Total O&M	2,594,700	3,072,000	3,084,000	12,800	3,140,800	56,000
% Change		18.4%		0.4%		1.8%

Note – Totals may not foot due to rounding.

FY 2016/17 BUDGET BY EXPENDITURE

FY 2017/18 BUDGET BY EXPENDITURE





PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		10	12	12	_	12	_
	O&M	10	12	12	_	12	_
	Capital	_	_	_	_	_	_
Temporary		_	_	_	_	_	_
	O&M	_	_	_	_	_	_
	Capital	_	_	_	_	_	_
Total Personnel		10	12	12	_	12	_
	0&M	`	12	12	_	12	_
	Capital	_	_	_	_	_	_

Note - Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Audit Department's Biennial Budget is \$3.1 million in FY 2016/17 and FY 2017/18.

• Salaries and Benefits costs were impacted by negotiated labor increases, merit increases for qualified employees and in the second year by an overall cost increase for operating expense of 2.25%.

ETHICS OFFICE

The Ethics Office promotes a transparent and ethical culture at Metropolitan by proposing and administering Metropolitan's ethics-related regulations and providing advice and education to the Metropolitan community.

PROGRAMS

Metropolitan's Ethics Office was established by special legislation enacted in 2000. As an independent department head, the Ethics Officer maintains a small staff and reports directly to the Board of Directors. The operations of the Ethics Office run the gamut of standard ethics and compliance functions: from training employees and board members on ethics rules and standards to policy-making to compliance. An important objective has been to balance these various responsibilities and to execute them in an integrated fashion to maximize their effectiveness.

Metropolitan's evolving approach to ethics is grounded in objective, measurable elements. Establishing clear and consistently applied rules is an essential condition of fair and predictable enforcement as well as practical and unambiguous advice and education. As a free-standing department, the Ethics Office continues to review and periodically recommend revisions to Metropolitan's internal ethics rules and standards to promote compliance through advice, education, and investigation of alleged violations.

The Ethics Office accomplishes its mission through the following programs or services:

Ethics Compliance Serving as filing officer for state-mandated financial interest disclosures for directors and hundreds of employees who make or participate in making decisions affecting outside financial interests. Maintaining and updating Metropolitan's code for designating positions and disclosure categories narrowly tailored to the unique responsibilities of each designated position.

Advice Providing advice, counseling, or other assistance to any director, officer, employee, or contractor regarding application or interpretation of Metropolitan's ethics rules or policies.

Typically, this advice focuses on options for avoiding conflicts of interest or other violations of standards of conduct for public officials.

Policy Analysis and Program Development

Performing risk assessment, drafting of proposed rules and procedures, preparing board and committee presentations, drafting strategic planning documents, analyzing procedural justice issues, and preparing case memoranda and correspondences.

Investigation Performing comprehensive investigations, including investigation planning, gathering of evidence, document review, witness interviews, comparative analysis of facts, drafting of reports, and organization and indexing of evidence.

Education Developing training programs, drafting publications, and preparing website content. The Office also facilitates sexual harassment prevention training for directors, and provides orientations for new directors and employees about Metropolitan's internal ethics provisions.

Outreach Holding events at headquarters and field facilities to communicate availability, purpose, and process of Ethics Office.

Management Providing oversight, planning, and administration of all Ethics Office programs. Proactively engaging, coordinating with, and receiving feedback from the board, senior management, and other interested persons.

GOALS AND OBJECTIVES

In FY 2016/17 and FY 2017/18, the Ethics Office will focus on the following key issues and initiatives:

Policy Development

In 2013 and 2014, the Ethics Office proposed and the board approved amendments to the foundational ethics rules within Metropolitan's Administrative Code. Some issues were deferred for later consideration. The Ethics Office plans to initiate further analysis and review of alternatives for promoting transparency and maintaining the integrity of procurements and other official decisions that can affect outside financial interests. The Office also plans to consider alternatives for identifying the relative seriousness of various potential violations, in order to provide guidelines for the board and department heads to apply when considering responsive actions related to investigation findings.

Investigation Process

Besides reviewing and updating procedures and guidelines, develop human resources capacity to plan, implement, and document investigations of alleged violations in accordance with best practices for quality, integrity, objectivity, and professionalism. Clarify responsibilities and duties of employees and others to cooperate fully in any investigation, along with consequences of non-cooperation, false statements, or obstruction.

Administration Providing case docketing and information management, intake administration, matter tracking, budget preparation, contract administration, and preparation of quarterly, semi-annual, and annual reports.

Program Development

Provide annual assessments of overall program effectiveness in annual business plans.

Develop and track metrics for accurately gauging the health of Metropolitan's ethics culture at any given time, in accordance with emerging findings and research in the ethics and compliance industry.

Maintain open lines of communication with the Audit and Ethics Committee and the Board, along with the other departments about program needs, trends, and directions.

Education and Outreach

Develop Ethics Office materials to increasingly and effectively communicate the Ethics Office's role at Metropolitan and how it can advance Metropolitan's core missions. Increase awareness among directors, employees, and other interested persons of how they can interact directly with the Ethics Office to address individual concerns. Update public website to enable easy access to program materials and public information.

Modernization of Business Processes

Implement an electronic system for compiling, and analyzing information and records for cases, investigations, advice responses, education, and administration. Develop automated reporting tools to promote clear reporting for auditing, board review, or other oversight purposes.

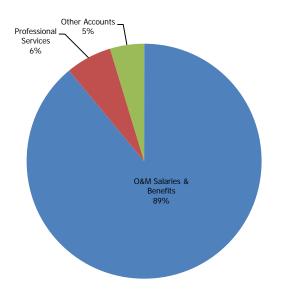
O&M FINANCIAL SUMMARY

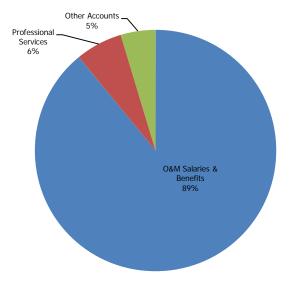
	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Total Salaries and Benefits	927,300	939,700	1,208,300	268,600	1,227,900	19,600
Direct Charges to Capital	_	_	_	_	_	_
O&M Salaries and Benefits	927,300	939,700	1,208,300	268,600	1,227,900	19,600
% Change		1.3%		28.6%		1.6%
Professional Services	40,300	100,000	85,000	(15,000)	85,000	_
Memberships & Subscriptions	2,400	3,500	15,000	11,500	15,000	<u></u>
Outside Services - Non Professional / Maintenance	11,900	_	15,000	15,000	15,000	_
Rent & Leases	2,000	3,500	3,500	_	3,500	_
Subsidies & Incentives	9,500	11,000	13,000	2,000	13,000	_
Training & Seminars Costs	_	4,000	6,000	2,000	6,000	_
Travel Expenses	600	4,000	6,000	2,000	6,000	_
Other Accounts	1,900	9,500	4,600	(4,900)	4,600	_
Total O&M	995,900	1,075,200	1,356,400	281,200	1,376,000	19,600
% Change		8.0%		26.2%		1.4%

Note – Totals may not foot due to rounding.

FY 2016/17 BUDGET BY EXPENDITURE

FY 2017/18 BUDGET BY EXPENDITURE





PERSONNEL SUMMARY

		2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Regular		4	4	5	1	5	_
	0&M	4	4	5	1	5	_
	Capital	_	_	_	_	_	_
Temporary		_	_	_	_	_	_
	0&M	_	_	_	_	_	_
	Capital	_	_	_	_	_	_
Total Personnel		4	4	5	1	5	_
	0&M	4	4	5	1	5	_
	Capital	_	_	_	_	_	_

Note - Totals may not foot due to rounding.

BUDGET HIGHLIGHTS

The Ethics Office's Biennial Budget is \$1.4 million in FY 2016/17 and \$1.4 million in FY 2017/18 or an increase of 26.2% and 1.4% respectively from the prior budget years. The increase is due primarily to the following:

• The Ethics Office is reorganizing, modifying positions, and adding one full-time employee, as described below

The following are the significant changes by budget year.

FY 2016/17

Personnel-related issues

The Ethics Office is reorganizing and reorienting its personnel resources in order to:

- Provide capacity for the Ethics Office to perform its core responsibilities with its own personnel.
- Enable the Ethics Office to function at the highest levels of professionalism, expertise, and integrity in the field of governmental ethics and compliance, and to meet the best practices standards in this emerging field.
- Enable the Ethics Officer to dedicate more time to addressing high-level issues with directors and senior management staff.
- Ensure continuation of operations in the event the Ethics Officer is absent or otherwise unable to act in person.



One existing position (Ethics Policy Analyst) will be altered to an Assistant Ethics Officer position, reporting directly to the Ethics Officer. This position will ensure consistency and coordination with the Ethics Officer's priorities and assist the Ethics Officer in considering actions or policies recommended by other professional staff. Also, consistent with the other three departments, this designation will enable continuation of operations in the event the Ethics Officer is absent or otherwise unable to act in person.

A new job classification Deputy Ethics Officer will be added. This classification will involve essential functions and qualifications consistent with midor advanced-level professionals in the field of government ethics and compliance. One Deputy Ethics Officer position will focus on investigations, fact-finding, and analysis. The other Deputy Ethics Officer position will focus on advanced research, writing, analysis, and drafting of policies, rules, and procedures, provide focused advice, and develop educational programs and materials.

One Deputy Ethics Officer position will be modified from a Principal Administrative Analyst classification. The other Deputy Ethics Officer position will be added as a new position within the Ethics Office.

As a result of these changes, the Ethics Office staff (including the Ethics Officer) will increase from four to five employees.

Professional Services

The Ethics Office does not anticipate major changes to its professional services requirements in the next two-year budget cycle.

FY 2017/18

Personnel-related issues

No additional anticipated changes.

Professional Services

No additional anticipated changes.

This page intentionally left blank.

STAFFING SUMMARY

Group/Department	2014/15 Actual	2015/16 Budget	2016/17 Budget	2017/18 Budget
Regular Employees				
Office of the General Manager	32	36	35	35
Water System Operations	883	949	951	951
Water Resource Management	59	68	68	68
Engineering Services	345	371	371	371
Business Technology	196	212	212	212
Human Resources	36	37	38	38
Real Property Development & Management	36	43	39	39
Office of the Chief Financial Officer	45	50	49	49
External Affairs	59	67	70	70
Subtotal Department	1,690	1,833	1,833	1,833
General Counsel	34	36	36	36
General Auditor	10	12	12	12
Office of Ethics	4	4	5	5
Subtotal Regular Employees	1,738	1,885	1,886	1,886
Temporary Employees				
District Temporary	36	20	22	20
Agency Temporary	7	0	4	4
Subtotal Temporary Employees	43	20	26	24
Total Authorized Positions		1,905	1,912	1,910
Unfunded / Vacancy		(56)	(72)	(69)
Total Employees	1,781	1,848	1,840	1,841

Note – Totals may not foot due to rounding.

OPERATING EQUIPMENT SUMMARY

Classification	2016/17 Quantity	2016/17 Amount	2017/18 Quantity	2017/18 Amount
Automobiles	1	\$ 8,720	1	12,576
Boats	3	95,475	11	366,230
CPU's, Laptops & Servers	1	16,350	2	182,925
Construction/Shop/Maintenance Equipment	32	626,968	32	627,840
Heavy Equipment	28	683,300	27	549,459
Lab Equipment	8	1,579,068	10	2,463,337
Monitoring Equipment	10	1,103,391	1	500,000
Other Equipment	19	274,503	2	27,468
Pumps	5	150,784	2	66,381
Survey Equipment	2	17,614	1	21,717
Trucks	1	102,460	1	102,460
Utility Vehicles	23	964,756	35	1,505,590
Total	133	\$ 5,623,389	125	\$ 6,425,983

Note – Totals may not foot due to rounding.

PERFORMANCE MEASURES

Performance Measure	Measurement Intent	FY 14/15 Performance	FY 15/16 Performance*	Target
Delta Milestones	Develop long-term Delta improvements through the State's Proposed Delta Improvements	80%	92%	90% for FY 14/15 95% for FY 15/16
	Develop and collaborate on near-term and drought related measures that improve water reliability, quality, and ecosystem health	80%	92%	100% for FY 14/15 95% for FY 15/16
	Pursue research to protect and restore fish, wildlife, and the Delta's ecosystem while ensuring water supply reliability	New measure	90%	95%
	Action toward achieving emergency response and other short-term Delta solutions.	95%	90%	100% for FY 14/15 95% for FY 15/16
Credit Rating	Enable Metropolitan to access capital markets at the lowest borrowing cost.	Moody's – Aa1 S&P – AAA Fitch – AA+	Moody's – Aa1 S&P – AAA Fitch – AA+	AA, Aa2 or better
Maintain Reserve Balances	Ensure financial strength by managing reserves to within Board-established policy.	\$476 M	\$465 M	\$482 M for FY 14/15 \$490 M for Fy 15/16
Fixed Charge Coverage	Demonstrate sufficiency of revenues to cover fixed charges.	1.79	1.44	≥ 1.2
High Performance Workplace	Assess workplace climate as a means of identifying potential improvements.	N/A	N/A	≥ 63%

Performance Measure	Measurement Intent	FY 14/15 Performance	FY 15/16 Performance*	Target
Public and Media Awareness	Monitor awareness of critical water issues to gauge effectiveness of outreach efforts as a percent of organizations reached with Metropolitan's message.	Media – 97% Legislative – 156%	Media - 97% Legislative - 120%	≥85%
Implement Legislative Strategy	Measure passage of Metropolitan-supported legislation as a measure of the effectiveness of efforts in support of water policy issues.	91%	92%	≥85%
Member Agency Service Satisfaction	Monitor Member Agency Service Level Satisfaction Index as an indicator of value of Metropolitan services to our customers.	65%	45%	≥ 80% (rating of "5" or better)
Unexpected Outages	Monitor water system maintenance and operations reliability to ensure undisrupted water service.	2	5	0 service shutdowns
Meet All Scheduled Water Deliveries	Monitor reliability of water delivery as an indicator of effectiveness of maintenance activities and replacement and improvement projects.	100%	100%	100%
Prioritize Maintenance	Optimize maintenance processes to ensure timely completion of preventative maintenance (PM) work.	87% 95% for regulatory PM	87% 90% for regulatory PM	> 90% of all PMs > 99% of regulatory PMs
CRA Power	Secure economical power for CRA pumping needs.	100%	100%	100%
Electrical Reliability	Meet electrical reliability standards to pass all annual audits and inspections.	100%	100%	100%
Aqueduct Readiness	Maintain eight-pump flow readiness to ensure conveyance reliability	CRA operating on 8-pump flow. No flow test performed.	CRA operated on an 8 pump flow (1775 cfs)	One stable test at eightpump flow (1,750 cfs) annually.

Performance Measure	Measurement Intent	FY 14/15 Performance	FY 15/16 Performance*	Target
Hydropower Generation	Optimize hydropower generation by minimizing power revenues lost to forced outages.	4.1%	0.1%	< 5% of power revenue lost
Emergency Preparedness	Prepare for emergencies by conducting three emergency response exercises at all operational units annually.	47	34	≥ 27/yr – FY 14/15 ≥ 39/yr – FY 15/16
O&M Training	Ensure O&M employees complete training in accordance with training plans	86%	88%	≥ 90%
Apprenticeship Program	Ensure sufficient apprentices graduate to meet 0&M needs.	13	0	≥15 graduates annually
Compliance with Drinking Water Standards	Ensure that all state, federal, and local water quality standards are met or exceeded.	100%	100%	100%
Total Dissolved Solids (TDS) mg/l	Monitor water quality compliance with the Board of Directors' salinity goals.	587 mg/l	631 mg/l	≤ 500 mg/l
Water Quality Satisfaction	Strive to minimize the number of customer complaints reported from member agencies as an indicator of overall water quality satisfaction.	3	0	< 10 complaints annually
Water Quality Regulatory Process	Actively engage in providing written comments on all applicable water quality regulations and public health determinations.	100%	100%	100%
Source Water Quality	Actively protect source water quality by engaging stakeholders on each recommendation from the 2012 Colorado River sanitary survey.	95%	100%	75% (for FY 2014/15; 100% completion by Dec 2015)
Environmental Compliance	Ensure compliance with all environmental permit requirements.	98.7%	96.5%	100%

Performance Measure	Measurement Intent	FY 14/15 Performance	FY 15/16 Performance*	Target
Manage SWP, supply programs and demand management program expenditures	Manage SWP, supply program, and demand management program expenditures within budget	90%	93%	100%
Worker Safety	Ensure worker safety by enacting practices that minimize the injury/illness rate.	3.16	2.76	< 6.9 (for FY 14/15 – 4.9)incidents/year/100 employees
Final Design	Ensure costs are compatible	5.7%	8.5%	9% - 12% (Const. Costs >
Efficiency	with industry standards of similar agencies by measuring for cost efficiency and value- added features.	16.4%	12.1%	\$3 M) 9% - 15% (Const. Costs ≤ \$3 M)
Construction	Ensure that capital projects are	12.2%	9.2%	9% - 12% (Const. Costs >
Inspection Efficiency	completed on time, on budget, meet specifications, and meet	20.3%	13.2%	\$3 M)
	customer needs at the lowest possible cost.			9% - 15% (Const. Costs ≤ \$3 M)
Completion of OPT Committee Milestones	Establish and meet expectations set by the Operations & Personnel Committee.	81%	N/A	100%
Number of Leases Negotiated at or above FMV	Monitor number of existing leases and new leases negotiated at or above Fair Market Value.	100%	100%	100%
Revenue	Track total revenue generated	\$6.0 M	\$6.4 M	\$10.4 M for FY 14/15
Generated from Real Property Activities	from all real property activities including but not limited to permits, licenses, leases, easements or other use fees.			\$6.6 M for FY 15/16
Departmental O&M Budget Performance	Demonstrate financial control and accountability.	98.1%	92.3%	≤ 100%
Significant External Audit Findings	Assess the quality of accounting processes and controls.	0	N/A	0

^{*} Actual performance through March 2016

STATE WATER PROJECT

OVERVIEW

The State Water Project (SWP), managed and operated by the Department of Water Resources (DWR), is the largest state-built, multipurpose, user-financed water project in the country. It was designed and built primarily to deliver water, but also provides flood control, generates power for pumping, is used for recreation, and enhances habitat for fish and wildlife. The SWP provides irrigation water to 750,000 acres of farmland, mostly in the San Joaquin Valley, and provides municipal and industrial water to approximately 25 million of California's estimated 37 million residents.

The SWP consists of a complex system of dams, reservoirs, power plants, pumping plants, canals and aqueducts to deliver water. Water from rainfall and snowmelt runoff is captured and stored in SWP conservation facilities and then delivered through SWP transportation facilities to water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. Metropolitan receives water from the SWP through the California Aqueduct, which is 444 miles long. The budgeted costs for the SWP are as follows:

SWP Cost Summary, \$ millions¹

	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Delta Water Charge: Capital	\$35.0	\$22.1	\$39.2	\$17.1	\$39.4	\$0.2
Delta Water Charge: OMP&R	68.7	56.5	102.1	45.6	105.3	3.3
Transportation Capital	122.9	147.9	137.3	(10.6)	139.8	2.5
Transportation OMP&R	145.4	128.2	177.4	49.2	184.0	6.6
Power, Variable	116.3	187.0	155.3	(31.7)	162.8	7.5
Power, OAPF	22.5	9.8	9.6	(0.2)	5.8	(3.8)
Credits	(72.5)	(36.3)	(38.6)	(2.3)	(37.9)	0.7
SWP Total ¹	\$438.3	\$515.0	\$582.3	\$67.3	\$599.4	\$17.1
SWC Dues	\$3.3	\$4.5	\$4.3	\$(0.2)	\$4.6	\$0.3
Acre-feet delivered	579,000	927,000	865,350	(61,650)	881,850	16,500

¹ Does not include Departmental costs reflected elsewhere in this Budget.

Annually, the DWR reviews and redetermines the water supply and financial aspects of the SWP as required by the SWC. This results in the annual Statement of Charges to the Contractors for each calendar year. The information that supports the Statement of Charges is published by the DWR as Appendix B to the appropriate Bulletin 132 (i.e., the Statement of Charges for Calendar Year 2016 is supported by Appendix B to

Bulletin 132-15). DWR does not charge rates for water service. It does not develop a revenue requirement and then develop rates based on projected billing determinants for a calendar year. Rather, DWR apportions its costs to the Contractors based on their proportionate share of estimated supply costs (Delta Water Charge) and transportation costs (Transportation Charge).

Metropolitan's budgeted SWP costs are based on the 2016 Statement of Charges and supporting Appendix B. Power costs are estimated by Metropolitan assuming a 50 percent allocation and use of the Central Valley storage programs.

STATE WATER CONTRACT

All water supply-related capital expenditures and operations, maintenance, power and replacement (OMP&R) costs associated with the SWP conservation and transportation facilities are paid for by 29 agencies and districts, known collectively as the State Water Contractors (Contractors). Through Calendar Year 2012, Metropolitan has paid about 60 percent of the total payments to DWR by all Contractors. Metropolitan's financial records show that total accumulated amounts paid under the SWC are \$10.7 billion through fiscal year 2013/14. Metropolitan's SWC expires on December 31, 2035.

The Contractors have long-term contracts with DWR for the delivery of SWP water and use of the SWP transportation facilities. Metropolitan signed the first State Water Contract (SWC) on November 4, 1960, and received its first delivery of SWP water in 1972. Metropolitan has a contractual right to a proportionate share of the project water that DWR determines is available for allocation to the Contractors. This determination is made each year based on existing supplies in storage, forecasted hydrology, and other factors. Available project water is then allocated to the Contractors in proportion to the amounts set forth in Table A of their SWCs (Table A Allocation). Under its SWC, Metropolitan is entitled to roughly 46% of the annual Table A Allocation.

Since inception, the SWC provided Contractors the ability to use the SWP to convey non-SWP water under certain circumstances. Specifically, Article 18(c)(2) of the original SWC addresses situations where there is a shortage in the supply of water made available under the contract and states "[T]he District, at its option, shall have the right to use any of the project transportation facilities which by reason of such permanent shortage in the supply of project water to be made available to the District are not required for delivery of project water to the District, to transport water procured by it from any other source: [p]rovided, [t]hat such use shall be within the limits of the capacities provided in the project transportation facilities for service to the District under this contract". However, Article 18(c)(2) only applied in the event a permanent shortage was declared by DWR and it was unclear on how costs would be charged for using SWP facilities to transport nonproject water. In 1994, the Contractors and DWR negotiated the Monterey Amendment to the SWC, including Article 55, which made explicit that the Contractors' rights to use the portion of the SWP conveyance system necessary to deliver water to them (their "reaches") also includes the right to convey non-SWP water at no additional cost as long as capacity exists. Power for the conveyance of non-SWP water is charged at the SWP melded power rate. The Monterey Amendments also expanded the ability to carryover SWP water in SWP storage facilities, allowed Contractors to store water in groundwater storage facilities outside a Contractor's service area for later use, and permitted certain Contractors to borrow water from terminal reservoirs. These amendments, approved by Metropolitan's Board in 1995, offered the means for individual Contractors to increase supply reliability through water transfers and storage outside their service areas.

The SWC is predominantly a 'take-or-pay' agreement, with Contractors paying most water conservation and transportation costs regardless of the amount of water delivered. The charges to the Contractors include a SWP supply charge (Delta Water Charge) and a SWP transportation charge (Transportation Charge). The Delta Water Charge recovers both Capital and OMP&R costs for those facilities that conserve and create the

actual water supply of the SWP. The Delta Water Charge is based on Contractors' cumulative Table A Allocations, and is paid regardless of whether Contractors receive any Table A Allocations in a given year.

The Transportation Charge recovers the costs associated with the various aqueduct reaches that deliver project water to the Contractors. The Capital and fixed OMPR portions of the SWP Transportation Charge recover costs from the Contractors based on their proportionate use of facilities. Unlike the Delta Water Charge, which is uniform for a unit of Table A water, the allocation of these portions of the Transportation Charge will vary based on the aqueduct segments needed to deliver water to a specific Contractor. The further a Contractor is from the Delta and the greater its capacity in the transportation facilities, the greater its allocation of the Capital and fixed OMPR Transportation Charges. The capacity of the SWP to deliver water decreases with distance from the Banks Pumping Plant, located in the Sacramento-San Joaquin Delta, as water is delivered to Contractors through the South Bay Aqueduct and the Coastal Branch Aqueduct, and to turnouts in the San Joaquin Valley and Southern California. Payment of the Transportation Charge entitles Contractors to the right to use their capacity in the SWP facilities for transportation of SWP or non-SWP water, on a space available basis, under the SWC. A Contractor that participates in the repayment of a particular reach, or segment of the SWP, has already paid the costs of using that reach for the conveyance of water supplies through the Transportation Charge. On average, Metropolitan pays about 63 percent of SWP transportation costs.

In addition to the charges for water supply and transportation facilities discussed above, DWR also charges for the power needed to deliver project water throughout the system. Two charges recover these power costs: the variable OPMR portion of the Transportation Charge (Variable Charge) and the Off Aqueduct Power Facilities (OAPF) charge. Because the SWC are cost recovery contracts, DWR invoices Contractors on an estimated basis for any calendar year, and then provides credits in later years once cost true-ups are finished.

The Variable Charge includes the annually estimated cost of purchased power including capacity and energy, cost of SWP power generation facilities, program costs to offset annual fish losses at the Banks Pumping Plant, purchased transmission services, and credits for sales of ancillary services and excess SWP system power sales. The Variable Charge is calculated on the basis of the energy required to pump an acre-foot of water to its take-out point multiplied by the system energy rate, less energy from the recovery generation plants. The system energy rate is a system-wide average rate calculated as the net cost of energy--total costs less revenues--divided by the net energy required to pump all water. That rate is applied to each acre-foot of water delivered to SWP customer based on the power required to pump the water to designated delivery points on the system. DWR can adjust the system energy rate as the calendar year progresses in order to reflect actual costs

The OAPF charge recovers the debt service and environmental remediation costs of power generation facilities not on the aqueduct, namely Reid Gardner Unit 4 and debt service associated with the South Geysers and Bottle Rock geothermal plants. The OAPF rate is calculated as the total annual estimated costs divided by the total energy required to pump all water. Recovery energy is not considered in this calculation. Each contractor's charge is the OAPF rate times the energy required to pump the contractor's water order.

The SWP uses low-cost hydroelectric and recovery generation resources, but they only provide about 50 percent of the SWP energy needs in an average water year. The SWP relies on the wholesale market and contractual resources with exposure to market price volatility for as much as 30 to 35 percent of its needs, using other contractual resources to fill in the difference.

The SWP energy required to move water to Metropolitan is related to the transportation on the East Branch through Devil Canyon and on the West Branch through Castaic. Because Metropolitan moves the largest amount of water on the SWP and Metropolitan's delivery points on the East and West Branch are at or near the southern extreme of the SWP, Metropolitan pays approximately 70 percent of the SWP power costs.

Cost of SWP Power for Metropolitan Terminal Delivery Points, \$ per Acre-Foot

					CY 2015		CY 2017
	DWR	DWR	DWR	DWR	Preliminary	Preliminary	Estimated
East Branch	\$197.34	\$224.27	\$230.27	\$280.07	\$241.17	\$267.57	\$205.08
West Branch	\$170.79	\$210.93	\$215.61	270.03	\$226.58	\$257.02	\$195.05

The SWP energy costs are impacted by the energy policies of the state of California. The SWP is acquiring renewable resources, primarily solar to date, to meet its obligation to reduce greenhouse gas emissions. The SWP energy costs are also impacted by the increasing cost of using the California Independent System Operator's (CAISO) grid to deliver power from its generating sources and the wholesale power market to its pumping loads. The SWP does not own high voltage transmission facilities and must use the CAISO grid to move power; the SWP is the largest payer of the CAISO transmission access rates. Finally, the SWP has an obligation to acquire and surrender emissions allowances for the generating facilities the SWP owns, primarily the Lodi Energy Center.

In total, Metropolitan paid 55 percent of the total SWP charges in Calendar Year 2014.

BUDGET HIGHLIGHTS

The budget for the SWP is increasing due to: higher labor costs; rehabilitation and replacement expenditures, including capital projects at Hyatt, Thermalito Power Plant, and the Perris Dam remediation; and fish restoration, fish mitigation, and Delta Compliance program costs. Power costs are projected to be lower due to: higher water deliveries which spread fixed power costs over a larger usage base; lower market costs for natural gas, wholesale power, and cap-and-trade emissions allowances; and a recent favorable environment for negotiating renewable power contracts.

COLORADO RIVER AQUEDUCT

OVERVIEW

Metropolitan was established to obtain an allotment of Colorado River water, and its first mission was to construct and operate the Colorado River Aqueduct (CRA). The CRA consists of 5 pumping plants, 450 miles of high voltage power lines, 1 electric substation, 4 regulating reservoirs, and 242 miles of aqueducts, siphons, canals, conduits and pipelines terminating at Lake Mathews in Riverside County. Metropolitan first delivered CRA water in 1941 to its member agencies.

Metropolitan owns, operates, and manages the Colorado River Aqueduct. Metropolitan is responsible for operating, maintaining, rehabilitating, and repairing the CRA, and is responsible for obtaining and scheduling energy resources adequate to power pumps at the CRA's five pumping stations.

Under its contracts with the federal government, Metropolitan has a fourth priority to 550,000 acre-feet per year of Colorado River water, less certain use by higher priority holders and Indian tribes. Metropolitan also holds a fifth priority for an additional 662,000 acre-feet per year that exceeds California's 4.4 million acre-foot per year basic apportionment, 38,000 acre-feet under the sixth priority during the term of the Colorado River Water Delivery Agreement, and another 180,000 acre-feet per year when surplus flows are available. Metropolitan can obtain water under the fourth, fifth, and sixth priorities from:

- Water unused by the California holders of priorities 1 through 3;
- Water saved by extraordinary conservation programs, crop rotation, and water supply program; or,
- When the U.S. Secretary of the Interior makes available:
 - o Surplus water, Intentionally Created Surplus water, and/or
 - o Water apportioned to, but unused by, Arizona and Nevada.

CRA Cost Summary¹, \$ millions

	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
CRA Power	\$39.6	\$36.5	\$46.6	\$10.1	\$54.4	\$7.8
CRA Dues ²	\$0.6	\$0.6	\$0.7	\$0.1	\$0.7	\$0
Acre-feet delivered	1,185,493	876,000	857,100	(18,900)	881,850	24,750

¹ Does not include Departmental costs reflected elsewhere in this Budget

Budgeted CRA Power costs represent expenditures for the Hoover and Parker contracts and market power purchases to support budgeted CRA water deliveries.

²Six Agency and Colorado River Authority of California

CRA COSTS FOR TRANSPORTATION AND SUPPLY

Metropolitan incurs capital and operations and maintenance expenditures to support the CRA activities. The direct costs of the CRA activities include labor, materials and supplies, outside services to provide repair and maintenance, and professional services. The CRA activities benefit from Water Systems Operations support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements on the CRA, and capitalizes those improvements as assets. The costs of Metropolitan's capital financing activities are apportioned to service functions, such as the CRA.

The costs of the CRA supply portfolio developed by Metropolitan are paid by Metropolitan. The CRA supply portfolio is supported by Water Resource Management labor, materials and supplies. The CRA supply portfolio activities benefit from Water Resource Management support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements associated with the CRA supply portfolio capital assets and has capitalized these investments as Participation Rights.

Accordingly, the CRA costs for transportation and supply are reflected in the Departmental and General District Requirements budgets.

CRA COST FOR POWER

Metropolitan currently has four basic sources of power available to meet CRA energy requirements: Hoover Power, Parker Power, Benefit Energy from Southern California Edison (SCE), and wholesale purchases from entities in the Western United States. Each source is obtained at different unit prices

Cost of CRA Power Sources, \$ per Megawatt-hour (MWh)

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Hoover ¹	\$16.81	\$17.26	\$18.60	\$29.74	\$15.84
Parker ¹	\$20.13	\$17.27	\$9.33	\$12.41	\$13.55
SP15, off-peak ²	\$23.73	\$23.44	\$33.15	\$40.24	\$33.15
SP15, on-peak ³	\$37.53	\$33.45	\$45.38	\$50.90	\$40.68

¹Information from Annual Reports for years 2011, 2012, 2013, 2014, and 2015

Under a contract between the United States, Department of Energy, Western Area Power Administration, and Metropolitan, Metropolitan currently has a right to approximately 247 megawatts (MW) of capacity at the Hoover Power Plant, which is about 12 percent of the total generating capacity. Metropolitan has an annual firm energy entitlement of 1,291 megawatt-hours (MWh) (904 MWh in summer and 387 MWh in winter), which is about 28 percent of the total Boulder Canyon Project (Hoover) firm energy allocations. This contract expires in 2017; a follow-on contract is in the process of negotiations. Hoover Power Plant generation is cost-

²SP15, off-peak price, described below, is used to determine the market value of Benefit Energy. Benefit Energy is available to Metropolitan for use only during off-peak hours. Thus, to the extent Benefit Energy is not available to meet Metropolitan's off-peak energy needs, Metropolitan must purchase off-peak power.

³SP15, on-peak, described below, is used to determine the market value of Metropolitan's sales of excess energy, if any. SP15 on-peak is also used to determine the pumping costs associated with pumping non-Metropolitan water through the CRA system, unless otherwise provided by contract.

based. Metropolitan acquired the benefits of the low-cost, federally funded hydroelectric plant in order to cost-effectively deliver Metropolitan's Colorado River water to its member agencies.

Under a contract among the United States, Department of the Interior, Bureau of Reclamation (Reclamation) and Metropolitan, Metropolitan funded the total cost of construction of Parker Dam and incidental facilities, and 50 percent of the construction cost of the Parker Powerplant. By providing the funding contribution, Metropolitan is entitled in perpetuity to 50 percent of the capacity and energy of the four Parker generating units, which is approximately 60 MW of capacity. Parker power is also cost-based. Like Hoover power, Metropolitan acquired the benefits of the low-cost, federally funded hydroelectric plant in order to cost-effectively deliver Metropolitan's Colorado River water to its member agencies.

Metropolitan has a Service and Interchange Agreement (Agreement) with SCE that provides services and benefits to both parties. The Agreement expires in 2017. Under the Agreement, SCE can dispatch Metropolitan's Hoover Dam and Parker Dam power entitlements and utilize excess transmission capacity on Metropolitan's CRA transmission system. SCE in return must meet Metropolitan's CRA energy and reliability requirements on a continuous basis. SCE must also provide Benefit Energy, the amount of which is determined annually, at no cost to Metropolitan for the benefits SCE receives.

Benefit Energy is the energy SCE provides to Metropolitan in consideration of the benefits SCE receives under the Service and Interchange Agreement. There is no charge for this energy. The amount of Benefit Energy available annually depends on the amount of water diverted through the CRA, and thereby the amount of energy used. Because SCE is obligated to meet the energy and reliability requirements of the CRA, SCE benefits if the CRA is not operating at full capacity. The relationship between the amount of Benefit Energy provided and pumping load is inverse: the more Metropolitan pumps, the less Benefit Energy SCE provides. Therefore, under a high diversion scenario, Metropolitan receives slightly less Benefit Energy to meet pumping loads than would be realized under a lower diversion scenario. The minimum amount of Benefit Energy provided annually by SCE is 200,000 MWh. The contract sets maximum and minimum amounts of Benefit Energy that can be allocated monthly. Benefit Energy can only be used to meet off-peak energy requirements. A follow-on contract to the Service and Interchange Agreement is in the process of negotiations.

Metropolitan's current basic resource mix is very cost effective but is not sufficient to pump Metropolitan's Colorado River water supplies in all years. For that reason, Metropolitan is required to purchase supplemental power to transport Colorado River water supplies in some years. As a result, Metropolitan requires that any party seeking to transport non-Metropolitan water through its Colorado River Aqueduct to purchase, or arrange for Metropolitan to purchase, the power supplies required to pump that water. The amount of power required to pump an acre-foot of water through the CRA is 2,000 kilowatt-hours. The additional pumping would also reduce the amount of Benefit Energy available to Metropolitan under the Service and Interchange Agreement with SCE. To compensate for this loss of Benefit Energy to Metropolitan, an additional 317 kilowatt-hours per acre-foot of water pumped must be provided to Metropolitan. Finally, any Colorado River water that is pumped through Metropolitan's CRA is diverted above Parker Dam and cannot generate energy for Metropolitan's use at the Parker Powerplant. To compensate for this loss, an additional 32 kilowatt-hours per acre-foot are required to make Metropolitan whole for undertaking to pump non-Metropolitan water through the CRA that would otherwise have flowed through the Parker Powerplant. In total, 2,349 kilowatt-hours (or 2.349 megawatt-hours) of energy must be provided to Metropolitan to convey each acre-foot of non-Metropolitan water supplies through the CRA.

Supplemental power can be purchased and transmitted to Metropolitan to pump non-Metropolitan water through the CRA. The market rate for electric energy prices is regularly tracked and published for various regions in California. Metropolitan uses the Platt's Market Report index and the California Independent System Operator (CAISO) Open Access Same-time Information System (OASIS) Day-Ahead Locational Marginal Price as reflective of the supplemental power costs for electric energy used for its pumping plants

on the CRA. The regional index applicable to energy sold for use on the CRA is designated as "South-of-Path 15", or SP15.

Any party seeking to pump non-Metropolitan water through the CRA would have to purchase, or arrange for Metropolitan to purchase on its behalf, supplemental power. The market cost for purchases of power for the CRA is reflected in the SP15 index published by Platt's Market Report or the CAISO OASIS Day-Ahead Locational Marginal Price. Because Metropolitan utilizes the pumping capacity on the CRA for its own water supplies during off-peak hours to minimize its costs, the pumping of non-Metropolitan water would occur during on-peak hours and the on-peak price index published in Platt's Market Report or the CAISO OASIS Day-Ahead Locational Marginal Price is indicative of the price that would be paid to pump non-Metropolitan water.

Metropolitan from time to time sells excess energy into the wholesale market and realizes revenues, which offset the total cost of energy as reflected in the System Power Rate. If Metropolitan were to deliver additional water through the CRA, these sales become a lost opportunity. The on-peak price index published in Platt's Market Report or the CAISO OASIS Day-Ahead Locational Marginal Price is indicative of the price that Metropolitan could realize by selling excess energy.

South-of-Path 15 On-Peak Energy Prices, \$/MWh

	CY 2011	CY 2012	CY 2013	CY 2014	CY 2015
January	\$ 37.13	\$ 28.73	\$ 46.15	\$ 49.53	\$ 35.70
February	\$ 38.13	\$ 29.05	\$ 46.45	\$ 71.85	\$ 31.88
March	\$ 32.72	\$ 24.85	\$ 51.39	\$ 52.06	\$ 30.73
April	\$ 36.01	\$ 29.33	\$ 56.34	\$ 51.19	\$ 29.03
May	\$ 34.91	\$ 31.36	\$ 51.49	\$ 51.85	\$ 28.11
June	\$ 36.98	\$ 31.43	\$ 47.77	\$ 50.90	\$ 37.01
July	\$ 41.20	\$ 36.46	\$ 51.74	\$ 53.18	\$ 39.27
August	\$ 42.25	\$ 44.32	\$ 45.44	\$ 50.47	\$ 39.02
September	\$ 41.53	\$ 41.99	\$ 48.91	\$ 51.49	\$ 38.00
October	\$ 34.78	\$ 42.81	\$ 42.82	\$ 49.06	\$ 35.55
November	\$ 34.49	\$ 39.84	\$ 44.13	\$ 49.28	\$ 30.22
December	\$ 32.59	\$ 38.77	\$ 52.14	\$ 41.80	\$ 29.83

MWh = megawatt-hour, or 1,000 kilowatt-hours

As key contracts expire in 2017, namely Hoover and the SCE Service and Interchange Agreement, Metropolitan's resource mix and costs will likely change. Metropolitan has an obligation to acquire and surrender emissions allowances for the generation that is imported into California. As these factors continue to develop, Metropolitan may face increased exposure to both on- and off-peak wholesale energy prices.

BUDGET HIGHLIGHTS

The budget for the CRA power is increasing due to expiration of the SCE Service and Interchange Agreement and the loss of Benefit Energy. Benefit Energy is replaced by market purchases, which increases the operating costs.

SUPPLY PROGRAMS

OVERVIEW

Metropolitan's principal sources of water supplies are the State Water Project (SWP) and the Colorado River. Metropolitan receives water delivered from the SWP under State Water Contract (SWC) provisions, including contracted supplies, use of carryover storage in San Luis Reservoir, and surplus supplies. Metropolitan also holds rights to a basic apportionment of Colorado River water and has priority rights to an additional amount from the Colorado River depending on availability of surplus supplies. The Supply Programs supplement these SWP and Colorado River supplies. The budgeted costs for the Supply Programs are as follows:

Supply Programs Cost Summary, \$ millions

	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
PVID Program	\$9.4	\$9.4	\$17.4	\$8.0	\$18.0	\$0.6
IID/MWD Conservation	\$12.8	\$12.6	\$10.8	\$(1.8)	\$11.0	\$0.2
Other CRA	\$17.1	\$15.5	\$24.3	\$8.8	\$23.6	\$(0.7)
In Basin	\$3.7	\$1.3	\$1.6	\$0.3	\$1.6	\$0.0
SWP Programs	\$51.2	\$36.5	\$24.6	\$(11.9)	\$27.5	\$2.9
Total Supply Programs ¹	\$94.3	\$75.3	\$78.7	\$3.4	\$81.7	\$3.0

¹ Does not include Departmental costs reflected elsewhere in this Budget.

Budgeted Supply Programs costs represent opportunities and actions associated with a 50 percent SWP allocation and deliveries on the CRA of 857.1 to 881.9 thousand acre-feet (TAF). On the SWP, Supply Program expenditures support maximizing storage capabilities of the Central Valley storage programs, utilizing transfer and exchange programs recently executed, and bringing the balance into the region. On the CRA, the expenditures support the Palo Verde Irrigation District land fallowing program and the Imperial Irrigation District/Metropolitan Conservation Program, as well as other programs to conserve and develop supplies.

SUPPLY PROGRAMS HAVE BEEN DEVELOPED TO CONVEY ON THE SWP TRANSPORTATION SYSTEM

Since inception, the SWC provided Contractors the ability to use the SWP to convey non-SWP water under certain circumstances. Specifically, Article 18(c)(2) of the original SWC addresses situations where there is a shortage in the supply of water made available under the SWC and states, "[T]he District, at its option, shall have the right to use any of the project transportation facilities which by reason of such permanent shortage in the supply of project water to be made available to the District are not required for delivery of project water to the District, to transport water procured by it from any other source: [p]rovided, [t]hat such use shall be within the limits of the capacities provided in the project transportation facilities for service to the District under this contract". However, Article 18(c)(2) only applied in the event a permanent shortage was declared by DWR and it was unclear on how costs would be charged for using SWP facilities to transport

nonproject water. In 1994, the Contractors and DWR negotiated the Monterey Amendment to the SWC, including Article 55, which made explicit that the Contractors' rights to use the portion of the SWP conveyance system necessary to deliver water to them (their "Reaches") also includes the right to convey non-SWP water at no additional cost as long as capacity exists. Power for the conveyance of non-SWP water is charged at the SWP melded power rate. The Monterey Amendment also expanded the ability to carry over SWP water in SWP storage facilities, allowed participating Contractors to borrow water from terminal reservoirs, and allowed Contractors to store water in groundwater storage facilities outside a Contractor's service area for later use.

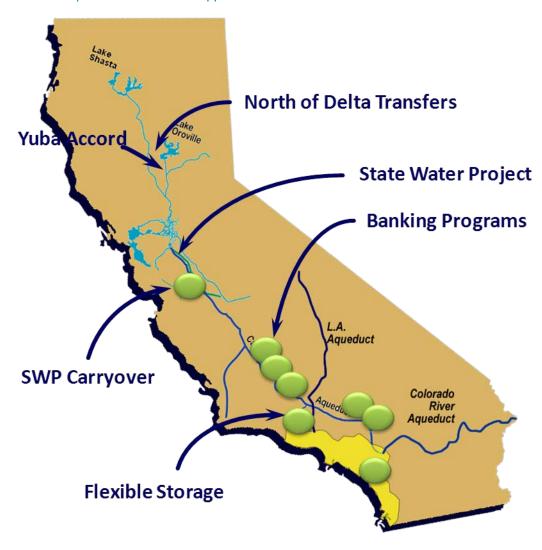
These amendments, approved by Metropolitan's Board in 1995, offered the means for individual Contractors to increase supply reliability through water transfers, and storage outside their service areas.

Since adoption of the 1996 Integrated Resources Plan (IRP) and subsequent updates, Metropolitan has developed and actively managed a portfolio of supplies to convey through the California Aqueduct. Metropolitan submits delivery schedules to DWR for these supplies, and alters these schedules throughout the year based on changes in the availability of SWP and Colorado River water. The figure below shows the geographic location of the portfolio of supplies that Metropolitan has developed to be conveyed through the SWP since adoption of the Monterey Amendment and the 1996 IRP. These resources extend from north of the Delta to Southern California.

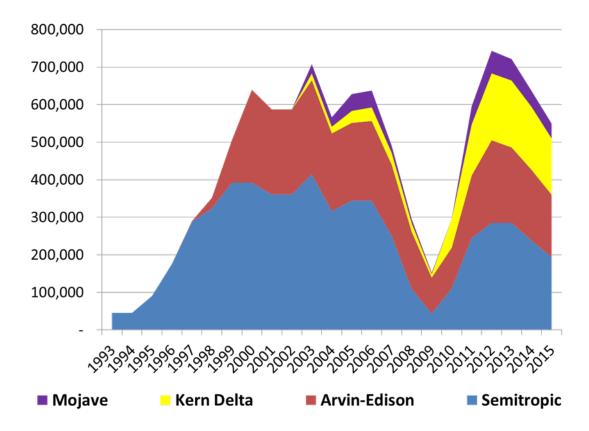
Since the Monterey Amendment, Metropolitan has secured one-year water transfer supplies through Metropolitan-only purchases, buyer coalition-purchases, and Governor Drought Water Banks. The most recent years in which these one-year transactions occurred were 2008 through 2010, 2013 and 2015. No purchases were made in 2011 or 2012 due to favorable water supply conditions. Most of the sellers were Sacramento Valley water users who are not Contractors. Other Contractors obtained one-year water transfers during this timeframe as well.

In addition to the one-year water transfers, Metropolitan purchases long-term water transfer supplies through the Yuba Accord. The Yuba Accord has provided water to enhance SWP and CVP water supply reliability by offsetting Delta export reductions and providing dry year water supplies for participating SWP and CVP contractors. This water is Yuba River water developed by Yuba County Water Agency (YCWA) making reservoir releases or by YCWA's member units substituting groundwater for their surface water supplies; it is not SWP water

California Aqueduct Portfolio of Supplies



Metropolitan also has developed groundwater storage agreements that allow Metropolitan to store available supplies in the Central Valley for return later. Metropolitan enters into agreements with DWR to deliver water supplies from the SWP facilities to these storage programs. Metropolitan enters into agreements for introduction of local supplies to return these water supplies to the SWP system for delivery to Metropolitan. The year-end balances of Metropolitan's SWP storage activities are shown in the graph below.



- Mojave Storage Program: under the agreement, Mojave Water Agency provides groundwater banking and exchange transfers to allow Metropolitan to store up to 390,000 acre-feet for later return. The agreement allows Metropolitan to annually withdraw Mojave Water Agency's SWP contractual amounts, after accounting for local needs.
- Kern Delta Storage Program: under the agreement, Kern Delta Water District provides groundwater banking and exchange transfer to allow Metropolitan to store up to 250,000 acre-feet of SWP water in wet years and take up to 50,000 acre-feet annually during droughts. The water is returned by direct groundwater pump-in or by exchange of surface water supplies.
- Arvin-Edison Storage Program: under the agreement, Arvin-Edison Water Storage District stores water on behalf of Metropolitan. Up to 350,000 acre-feet can be stored; Arvin-Edison is obligated to return up to 75,000 acre-feet of stored water in any year to Metropolitan, upon request. The water is returned by direct groundwater pump-in and exchange of SWP supplies.
- Semitropic Storage Program: under the agreement, Metropolitan stores water in the groundwater basin underlying land within the Semitropic Water Storage District. The maximum storage capacity is 350,000 acre-feet. As of December 2014, the minimum annual yield to Metropolitan is 34,700 acre-feet, and the maximum annual yield is 236,200 acre-feet depending on the available unused capacity and the SWP allocation. The water is returned by direct groundwater pump-in and exchange of SWP supplies.
- Antelope Valley East Kern (AVEK) Storage and Exchange Program: under the agreement, AVEK provides at least 30,000 acre-feet over ten years of its unused SWP Table A amount to Metropolitan and Metropolitan, at its discretion, would return half of the exchange water to AVEK at the Banks pumping plant. Under the Storage Program, Metropolitan, at its discretion, could store at least 30,000 acre-feet of its SWP

Table A amount or other supplies in the Antelope Valley Groundwater Basin in an account designated for Metropolitan.

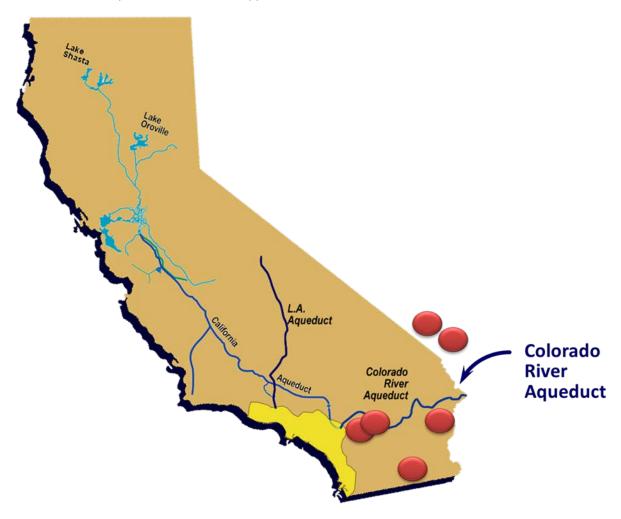
Metropolitan has developed exchanges and transfers with other Contractors to enhance supply flexibility. Some of these agencies have extensive groundwater supplies and are willing to exchange their SWP supplies.

- San Bernardino Valley Municipal Water District: under the agreement, Metropolitan can exchange up to 11,000 acre-feet on an annual basis with the return negotiated.
- San Gabriel Valley Water District: under this agreement, Metropolitan delivers treated water to a San Gabriel Valley Water District subagency in exchange for twice as much untreated SWP supplies delivered into the groundwater basin that supplies this agency and Metropolitan subagencies. Metropolitan can purchase at least 5,000 acre-feet per year, in excess of the unbalanced exchange amount. There are no fees to put water into storage, or take water out of the storage account. This program has the potential to increase Metropolitan's reliability by providing 115,000 acre-feet through 2035.
- Desert Water Agency/Coachella Valley Water District Advance Delivery Program: under this program, Metropolitan delivers Colorado River water to the Desert Water Agency (DWA) and Coachella Valley Water District (CVWD) in exchange for those agencies' SWP Contract Table A allocations to be delivered to Metropolitan at a later date. In addition to their Table A supplies, DWA and CVWD can take delivery of SWP supplies available under Article 21 of the SWC and the Turn-back Pool Program, and non-SWP supplies separately acquired by each agency. These non-SWP supplies have included Yuba Accord water, drought water bank water, and San Joaquin Valley water. Thus the availability of other water sources allows DWA and CVWD to exchange their Table A supplies with Metropolitan. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive DWA and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient without having to deliver an equivalent amount of Colorado River water.

SUPPLY PROGRAMS HAVE BEEN DEVELOPED TO CONVEY ON THE CRA

Since adoption of the 1996 Integrated Resources Plan (IRP) and subsequent updates, Metropolitan has developed and actively manages a portfolio of supplies to convey through the CRA, and as owner and operator, determines the delivery schedule of those resources throughout the year based on changes in the availability of SWP and Colorado River water. The figure below shows the geographic location of the portfolio of supplies that Metropolitan has developed for diversion into the CRA since adoption of the 1996 IRP. These resources extend from Lake Mead to Southern California.

Colorado River Aqueduct Portfolio of Supplies



- Imperial Irrigation District/Metropolitan Conservation Program: Under a 1988 Conservation Agreement, Metropolitan has funded water efficiency improvements within the Imperial Irrigation District's (IID) service area in return for the right to divert the water conserved by those investments. 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. Execution of the Quantification Settlement Agreement (QSA) and other agreement amendments resulted in changes in the availability of water under the program. As a result of a 2014 IID-Metropolitan letter agreement, the amount to be made available by IID has been quantified at 105,000 acre-feet per year beginning in 2016. Metropolitan is guaranteed at least 85,000 acre-feet per year, with the remainder of the conserved water being made available to CVWD, if needed under the 1989 Approval Agreement as amended.
- Palo Verde Land Management, Crop Rotation, and Water Supply Program: Under this program, participating landowners in the Palo Verde Irrigation District (PVID) are paid to reduce water use by not irrigating a portion of their land. A maximum of 29 percent of the participating lands within the Palo Verde Valley can be fallowed in any given year. This program saves up to 133,000 acre-feet of water in certain years, and a minimum of 33,000 acre-feet per year. The term of the program is 35 years. Fallowing began on January 1, 2005. In March 2009, Metropolitan and PVID entered into a supplemental emergency fallowing program within PVID that provided for the fallowing of additional acreage in 2009 and 2010. Since 2005, as much as 148,600 acre-feet of water was saved. The volume of water that becomes available to Metropolitan is governed by the QSA and the Colorado River Water Delivery Agreement. Under these agreements:

- o Metropolitan must reduce its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is greater than 420,000 acre-feet in a calendar year, or
- o Metropolitan may increase its consumptive use of Colorado River water by that volume of consumptive use by PVID and holders of Priority 2 that is less than 420,000 acre-feet in a calendar year.

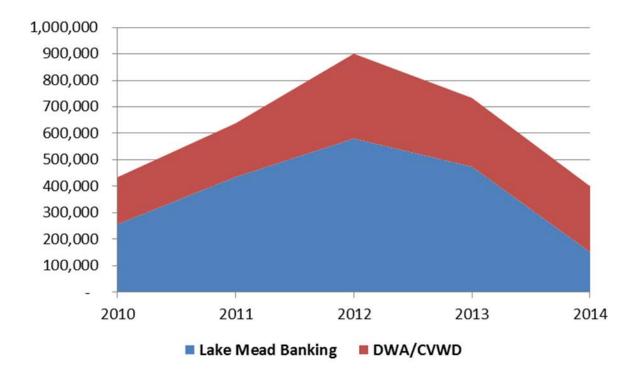
In both cases, each acre-foot of reduced consumptive use by PVID is an additional acre-foot that becomes available to Metropolitan.

- All-American and Coachella Canal Lining Projects: Metropolitan takes delivery of 16,000 acre-feet of water annually as a result of the All-American and Coachella Canal Lining Projects. In the future, that water 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 among those parties and the United States.
- Southern Nevada Water Authority and Metropolitan Storage and Interstate Release Agreement: Under this 2004 agreement and a related Operational Agreement, additional Colorado River water supplies are made available to Metropolitan when there is space available in the CRA to receive the water, subject to a request by Southern Nevada Water Authority (SNWA) for Metropolitan to reduce its Colorado River water order to return a portion of this water. In 2009, 2012, and 2015, Metropolitan, the Colorado River Commission of Nevada, and SNWA amended the related Operational Agreement. The agreements can be terminated upon 90 days' notice following the return of the water stored by Metropolitan.
- Lower Colorado Water Supply Project: Under a contract among Metropolitan, the City of Needles, and the United States Bureau of Reclamation, Metropolitan receives annually exchange water unused by the City of Needles and other entities who have no rights or insufficient rights to use Colorado River water in California. The beneficiaries of the project, including the City of Needles, receive water exchanged for groundwater pumped from wells into the All-American Canal. Metropolitan makes payments to a trust fund to develop a replacement project or to desalt the groundwater should the groundwater become too saline for discharge into the All-American Canal.
- Lake Mead Storage Program: In December 2007, Metropolitan entered into agreements to set forth the guidelines under which Intentionally Created Surplus (ICS) water is developed, and stored in and delivered from Lake Mead. The amount of water stored in Lake Mead, created through extraordinary conservation, system efficiency, or tributary conservation methods, is available for delivery in a subsequent year, with extraordinary conservation ICS subject to a one-time deduction and evaporation losses. Extraordinary conservation methods used by Metropolitan to date are water saved by fallowing in the Palo Verde Valley, projects implemented with IID in its service area, and groundwater desalination. The guidelines concerning the operation of the Colorado River system reservoirs provide the ability for agencies to create "System Efficiency ICS" through the development and funding of system efficiency projects that save water that would otherwise be lost from the Colorado River. Metropolitan has participated in two projects to create System Efficiency ICS:
 - Drop 2 (Warren H. Brock) Reservoir: Metropolitan contributed funds toward 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. This reservoir conserves about 70,000 acre-feet of water per year by capturing and storing otherwise non-storable flow. In return for its funding, Metropolitan received 100,000 acre-feet of water that was stored in Lake Mead, and has the ability to receive up to 25,000 acre-feet of water in any single year. Besides the additional water supply, the new reservoir adds to the flexibility of Colorado River operations.

- o Yuma Desalting Plant: Metropolitan contributed to a one-year pilot operation of the Plant at one-third capacity to provide data regarding the long-term operation of the Plant. 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 between 2013 and 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. 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, 23,750 acre-feet.
- Hayfield Groundwater Storage Program: This program will allow Metropolitan to store Colorado River water in the Hayfield Groundwater Basin in eastern Riverside County for future withdrawal and delivery to the CRA. Drought conditions in the Colorado River watershed have resulted in a lack of surplus supplies for storage. When water supplies become more plentiful, Metropolitan may pursue this program and develop storage capacity of about 400,000 acre-feet.
- Desert Water Agency/Coachella Valley Water District/Metropolitan Water Exchange and Advance Delivery Programs: under these programs, Metropolitan delivers Colorado River water to the DWA and CVWD, in advance of the exchange for their SWP supplies. By delivering enough water in advance to cover Metropolitan's exchange obligations, Metropolitan is able to receive DWA and CVWD's available SWP supplies in years in which Metropolitan's supplies are insufficient without having to deliver an equivalent amount of Colorado River water.

The year-end balances of Metropolitan's CRA storage programs are shown in the graph below.

CRA Storage Programs year-end balance, acre-feet



BUDGET HIGHLIGHTS

The budget for the Supply Programs increases slightly over the budget period compared to FY 2015/16. This reflects the assumption of a 50 percent allocation on the SWP and approximately 857.1 to 881.9 TAF of deliveries on the CRA over the same three budget periods.

This page intentionally left blank.

DEMAND MANAGEMENT

OVERVIEW

Demand Management costs are Metropolitan's expenditures for funding local water resource development programs and water conservation programs. These demand management programs incentivize the development of local water supplies and the conservation of water to reduce the reliance on imported water. These programs are implemented after the service connection between Metropolitan and its member agencies and, as such, do not add any water to the quantity Metropolitan obtains from other sources or to Metropolitan's own supply. Rather, the effect of these downstream programs is to produce a local supply of water for the local agencies.

Demand Management programs reduce the use of and burden on Metropolitan's distribution and conveyance system, which, in turn, helps reduce the capital, operating, maintenance and capital improvement costs associated with these facilities. For example, local water resource development and conservation has deferred the need to build additional infrastructure such as the Central Pool Augmentation Project and the San Diego Pipeline No. 6. Overall, the decrease in demand resulting from these projects is estimated to defer the need for projects between four and twenty-five years at a savings of between \$324 and \$910 million. The programs also free up capacity in Metropolitan's system to convey both Metropolitan water and water from other non-Metropolitan sources.

The budgeted costs for Demand Management are as follows:

Demand Management Cost Summary¹, \$ millions

	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Conservation Credits Program	\$134.4	\$20.0	\$27.0	\$7.0	\$32.0	\$5.0
Local Resources Program	\$35.8	\$41.7	\$43.7	\$2.0	\$41.9	\$(1.8)
Future Supply Actions		0	\$4.4	\$4.4	\$2.0	\$(2.4)

¹ Does not include Departmental costs reflected elsewhere in this Budget.

Budgeted Demand Management costs reflect increasing the financial commitment for the Conservation Credits Program and maintaining the financial incentives for existing contracts under the Local Resources Program.

In addition to Metropolitan's own objectives, Metropolitan also pursues local water resource development because it has uniquely been directed to do so by the state Legislature. In 1999, then Governor Davis signed Senate Bill (SB) 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase conservation and local resource development. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

Metropolitan's Demand Management programs also support the region's compliance with the requirements of SB X7-7. In 2009, the state Legislature passed SB X7-7, which was enacted to reduce urban per capita water use by 20 percent by December 31, 2020. Urban retail water suppliers are not eligible for state water grants or loans unless they comply with the water conservation requirements of the legislation. Demand Management programs help the region achieve urban per capita water use reductions.

Demand Management costs also support the Strategic Plan Policy Principles approved by Metropolitan's Board on December 14, 1999. These principles embody the Board's vision that Metropolitan is a regional provider of wholesale water services. In this capacity, Metropolitan is the steward of regional infrastructure and the regional planner responsible for coordinated drought management and the collaborative development of additional supply reliability and necessary capacity expansion. Through these regional services, Metropolitan ensures a baseline level of reliability and quality for service in its service area.

DEMAND MANAGEMENT PROGRAMS REDUCE RELIANCE ON IMPORTED WATER

Metropolitan increased the emphasis on Demand Management programs after the devastating drought of the early 1990's. Metropolitan's 1996 Integrated Resources Plan identified the Preferred Resource Mix as the resource plan that achieved the region's reliability goal of providing the full capability to meet all retail-level demands during all foreseeable hydrologic events, represented the least-cost sustainable resources plan, met the region's water quality objectives, was balanced and diversified and minimized risks, and was flexible, allowing for adjustments should future conditions change.

The Preferred Resource Mix included locally developed water supplies and conservation, and recognized that regional participation was important to achieve their development. Additional imported supplies frequently have relatively lower development costs, but can create a large cost commitment for regional infrastructure to transport and store those imported supplies. On the other hand, local projects, like those designed to recycle water or increase groundwater production, may have higher development costs but require little or no additional infrastructure to distribute water supplies to customers. This trade-off between relatively lower-cost imported supplies requiring large regional infrastructure investments and relatively higher-cost local supply development requiring less additional local infrastructure was an important consideration in the development of the Preferred Resource Mix. A strategy of aggressively investing in imported water supply would lead to higher costs for the region because of the larger investments required in infrastructure. Since 1996, the Integrated Resources Plan has been updated twice, in 2004 and 2010, reaffirming long-term sustainability of the region's water supply through implementation of conservation and local resource development.

DEMAND MANAGEMENT PROGRAMS REDUCE DEMANDS AND BURDENS ON METROPOLITAN'S SYSTEM

Demand Management programs decrease and avoid operating and maintenance and capital improvement costs, such as costs for repair of and construction of additional or expanded water conveyance, distribution, and storage facilities. The programs also free up capacity in Metropolitan's system to convey both Metropolitan water and water from other non-Metropolitan sources.

The purpose of Demand Management is to generate additional local resources or reduce consumption through conservation, which reduces the amount of water that must otherwise be transported through Metropolitan's system. Investments in Demand Management programs like conservation, water recycling and groundwater recovery help defer the need for additional conveyance, distribution, and storage facilities. Demand Management is an important part of Metropolitan's resource management efforts. Metropolitan's

incentives in these areas contribute to savings for all users of the system in terms of lower capital costs that would otherwise have been required to expand and maintain the system.

SB 60 DIRECTED METROPOLITAN TO EXPAND DEMAND MANAGEMENT PROGRAMS

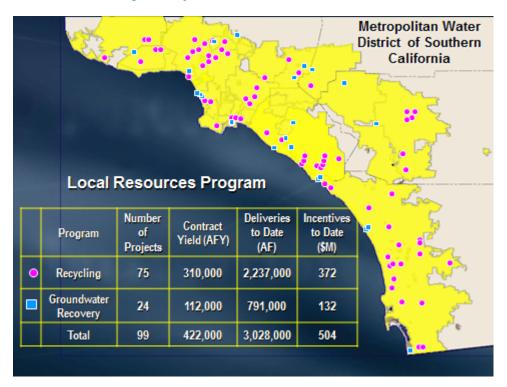
In September 1999, Governor Gray Davis signed SB 60 (Hayden) into law. SB 60 amended the Metropolitan Water District Act to direct Metropolitan to increase "sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." SB 60 also requires Metropolitan to hold an annual public hearing to review its urban water management plan for adequacy in achieving an increased emphasis on cost-effective conservation and local water resource development, and to invite knowledgeable persons from the water conservation and sustainability fields to these hearings. Finally, Metropolitan is required to annually prepare and submit to the Legislature a report on it progress in achieving the goals of SB 60. SB 60 specifically indicated that no reimbursement was required by legislation because Metropolitan, as a local agency, has the authority to levy service charges, fees or assessments sufficient to pay for the program or level of service mandated by SB 60. No other water utility in California, public or private, has been specifically identified by the state Legislature and directed to pursue water conservation and local water resource development.

In FY 2014/15 alone, Metropolitan's service area achieved 1.5 million acre-feet of water savings from conservation, recycled water and groundwater recovery programs. The 1.5 million acre-feet of water savings from water management activities in fiscal year 2014/15 nearly equaled actual water sold in the same period of 1.91 million acre-feet. These savings derived from programs for which Metropolitan paid incentives, as well as code-based conservation achieved through legislation, building and plumbing codes and ordinances, and reduced consumption resulting from changes in water pricing. Cumulatively, since 1990 Metropolitan has invested almost \$1 Billion to achieve water savings.

Metropolitan's Conservation Credits Program provides incentives to residents and businesses for use of water-efficient products and qualified water-saving activities. Rebates have been provided to residential customers for turf removal and purchasing of high-efficiency clothes washers and toilets. Rebates are also provided to businesses and institutions for water-saving devices. In fiscal year 2014/15, the Conservation Credits Program achieved 944,000 acre-feet of saved water through new and existing conservation initiatives funded with incentives and maintained through plumbing codes. Cumulatively, through fiscal year 2014/15 the Conservation Credits Program has achieved over 2.2 million acre-feet of water savings.

Metropolitan provides financial incentives through its Local Resources Program for the development and use of recycled water and recovered groundwater. The Local Resources Program consists of 75 recycling projects and 24 groundwater recovery projects located throughout Metropolitan's service area, of which 85 projects are in operation. From the Local Resources Program's inception in 1982 through FY 2014/15, Metropolitan has paid out about \$372 million in incentives to produce about 2.2 million acre-feet of recycled water. Metropolitan also provided approximately \$132 million to produce 791,000 acre-feet of recovered degraded groundwater for municipal use.

Local Resources Program Projects



SB X7-7 REQUIRES INCREASED CONSERVATION

SBX7-7 mandated a new requirement to lower urban per capita water use 20 percent by December 31, 2020. Enacted by the state Legislature and signed into law by Governor Schwarzenegger as part of a historic package of water reforms in November 2009, the "20x2020" plan gave local communities flexibility in meeting this target while accounting for previous efforts in conservation and recycling. The Legislature found that reducing water use through conservation and regional water resources management would result in protecting and restoring fish and wildlife habitats, reducing dependence on water through the Delta, and providing significant energy and environmental benefits. Metropolitan coordinates closely with its member agencies to achieve these targets both at a retail agency level in compliance with legislative requirements, and as a region in achieving a true 20 percent reduction in per-capita water use.

BUDGET HIGHLIGHTS

The budget for the Demand Management costs is increasing slightly when comparing the Biennial Budget to FY 2015/16, due primarily to increased expenditures for the Conservation Credits Program.

CAPITAL FINANCING

OVERVIEW

Capital financing costs are Metropolitan's expenditures for revenue bond debt service, General Obligation bond debt service, debt administration costs, the funding of capital expenditures from current operating revenues, or Pay-As-You-Go (PAYGo), and State Revolving Fund (SRF) Loan payments.

The budgeted costs for capital financing are as follows:

Capital Financing Cost Summary, \$ millions

	2014/15 Actual	2015/16 Budget	2016/17 Budget	Change from 2015/16	2017/18 Budget	Change from 2016/17
Debt Service, net of BABs Reimbursement	\$266.3	\$296.4	\$298.7	\$2.3	\$318.1	\$19.4
GO Bond Debt Service	23.4	23.3	23.3	0	18.8	(4.5)
SRF Loan	1.3	1.3	1.3	0	1.3	0
Debt Administration	2.7	3.7	5.2	1.5	5.9	0.7
PAYGo	210.2	221.0	120.0	(101.0)	120.0	0
Total ¹	\$503.9	\$545.7	\$448.5	\$(97.2)	\$464.1	\$15.6

¹ Does not include Departmental costs reflected elsewhere in this Budget.

Budgeted amounts for Capital Financing represent the expenditures for existing and future debt service, anticipated debt administration costs to support the debt portfolio, and lower PAYGo amounts to support a lower Capital Investment Plan. Metropolitan generally incurs long-term debt to finance projects or purchase assets which will have useful lives equal to or greater than the related debt. Revenue supported debt can be authorized by Metropolitan's Board of Directors.

CAPITAL INVESTMENT PLAN

The Capital Investment Plan (CIP) for FY 2016/17 and FY 2017/18 is estimated to be \$200.0 million in each fiscal year. It is proposed to be funded by current operating revenues (PAYGo) and revenue bond proceeds. The FY 2016/17 CIP is \$68 million lower than the FY 2015/16 Adopted budget, and the FY 2017/18 CIP is unchanged from FY 2016/17. The largest areas of expenditures in the Biennial Budget are Infrastructure Reliability and Water Quality.

The CIP budget as developed by Engineering and presented in the Capital Expenditures section of the budget book is estimated to be \$246 million for FY 2016/17 and \$240 million for \$FY 2017/18. Over the last five

years, actual expenditures have been about 20% below budget. In keeping with that trend, the current proposal for the two years is 80% of planned engineering expenditures or \$200 million in each fiscal year.

PAYGo Percentage of Funding, \$ millions

	2015/16 Budget	2016/17 Budget	2017/18 Budget
Capital Investment Plan expenses	\$267.9	\$200.0	\$200.0
Project Funding:			
New Bond Issues		90.0	80.0
Prior Bond Funds/Construction Fund		20.0	50.0
Grants and Loans Funds			
Operating Revenues (PAYGo)	221.0	120.0	120.0
R&R Fund	47.0		
PAYGo Percentage of Funding	100.0%	60.0%	60.0%

In FY 2016/17 and FY 2017/18, the percentage of capital that is funded by debt will be set at 40 percent, consistent with the FY 2014/15 and FY 2015/16 ten-year forecast for this time period. The projected average percentage of capital funded from debt will be 40 percent over the ten years of the long-range forecast.

OUTSTANDING DEBT

Metropolitan has total long-term debt outstanding of \$4.35 billion as of December 31, 2015. Metropolitan's debt issues are summarized below and discussed in detail thereafter.

Issue	Debt Outstanding
Long Term Debt:	
Water Revenue Refunding Bonds, 1993 Series A	\$86,540,000
Water Revenue Bonds, 2000 Authorization, Series B-3	88,800,000
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	389,235,000
Water Revenue Refunding Bonds, 2008 Series A-2(1)	62,465,000
Water Revenue Refunding Bonds, 2008 Series B	126,980,000
Water Revenue Refunding Bonds, 2008 Series C	34,700,000
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	12,735,000
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	58,860,000
Water Revenue Refunding Bonds, 2009 Series E	15,590,000
Water Revenue Bonds, 2010 Authorization, Series A(2)	250,000,000
Water Revenue Refunding Bonds, 2010 Series B	79,330,000
Water Revenue Refunding Bonds, 2011 Series A1-A4(1)	228,875,000
Water Revenue Refunding Bonds, 2011 Series B	35,760,000
Water Revenue Refunding Bonds, 2011 Series C	147,935,000
Water Revenue Refunding Bonds, 2012 Series A	181,180,000
Water Revenue Refunding Bonds, 2012 Series B-1 and B-2(1)	98,585,000
Water Revenue Refunding Bonds, 2012 Series C	190,600,000
Water Revenue Refunding Bonds, 2012 Series D	605,000
Water Revenue Refunding Bonds, 2012 Series E3	31,220,000
Water Revenue Refunding Bonds, 2012 Series F	59,335,000
Water Revenue Refunding Bonds, 2012 Series G	111,890,000
Special Variable Rate Water Revenue Refunding Bonds, 2013 Series D(1)	87,445,000
Special Variable Rate Water Revenue Refunding Bonds, 2013 Series E(1)	104,820,000
Water Revenue Refunding Bonds, 2014 Series A	95,935,000
Water Revenue Refunding Bonds, 2014 Series B	10,575,000
Water Revenue Refunding Bonds, 2014 Series C1-C3	30,335,000
Special Variable Rate Water Revenue Refunding Bonds, 2014 Series D(1)	63,575,000
Water Revenue Refunding Bonds, 2014 Series E	86,060,000
Water Revenue Refunding Bonds, 2014 Series G1-G5	57,840,000
Special Variable Rate Water Revenue Refunding Bonds, 2015 Series A-1 and A-2(1)	188,900,000
Water Revenue Bonds, 2015 Series A	208,255,000
Total Revenue Bonds	\$4,237,960,000
Waterworks General Obligation Refunding Bonds, 2009 Series A	\$33,485,000
Waterworks General Obligation Refunding Bonds, 2010 Series A	27,290,000
Waterworks General Obligation Refunding Bonds, 2014 Series A	49,645,000
Total General Obligation Bonds	\$110,420,000
Total Long-Term Debt:	\$4,348,380,000
	. , , , , , , , , , , , , , , , , , , ,

⁽¹⁾ Outstanding variable rate obligation.

⁽²⁾ Designated as "Build America Bonds" pursuant to the American Recovery and Reinvestment Act of 2009.

DEBT SERVICE

Debt Service payments in FY 2016/17 are budgeted at \$328.5 million and includes \$23.3 million in General Obligation bond debt service, \$298.7 million in revenue bond debt service, \$1.3 million for SRF Loan payments, and \$5.2 million for debt administration costs.

Debt Service payments in FY 2017/18 are budgeted at \$344.1 million and include \$18.8 million in General Obligation bond debt service, \$318.1 million in revenue bond debt service, \$1.3 for SRF Loan payments, and \$5.9 million for debt administration costs. Total debt service costs in FY 2017/18 are expected to be \$15.6 million more than the FY 2016/17 payments due to new money bond issues.

Interest payments on synthetic fixed rate debt were calculated at their associated swap rates plus any spread (if known). Interest rates on variable rate debt were calculated at 0.45 percent for FY 2016/17 and 0.80 percent for FY 2017/18.

Outstanding variable rate debt on December 31, 2015 was approximately \$1.03 billion, including bonds bearing interest in the Index Mode or Flexible Index Mode, special variable rate bonds initially designated as self-liquidity bonds, and variable rate demand obligations supported by standby bond purchase agreements between Metropolitan and various liquidity providers. Of the \$1.03 billion, \$493.6 million are treated by Metropolitan as fixed rate debt by virtue of interest rate swap agreements. The remaining \$534 million of variable rate obligations represent approximately 12.6 percent of total outstanding water revenue bonds.

Going forward, Metropolitan will finance its construction program through a combination of fixed-rate debt and variable rate debt. Metropolitan intends to issue approximately \$90 million of new debt in FY 2016/17 and \$80 million of new debt in FY 2017/18.

DEBT RATINGS

Credit risk is the risk that a financial loss will be incurred if a counterparty to a transaction does not fulfil its financial obligations in a timely manner. This is measured by the assignment of a rating by a nationally recognized statistical credit rating organization. Strong credit ratings provide tangible benefits to ratepayers in the form of reduced debt service cost. A strong credit rating provides better access to capital markets, lower interest rates and better terms on debt, and access to a greater variety of debt products. Prudent financial management policies have resulted in bond ratings of AAA from Standard & Poor's, Aa1 from Moody's, and AA+ from Fitch.

DEBT POLICY AND COVERAGE

Metropolitan is subject to limitations on additional revenue bonds. Resolution 8329 (the "Master Revenue Bond Resolution"), adopted by Metropolitan's Board in 1991 and subsequently supplemented and amended, provides for the issuance of Metropolitan's revenue bonds. The Master Revenue Bond Resolution limits the issuance of additional obligations payable from Net Operating Revenues, among other things, through the requirement that Metropolitan must meet an Additional Bonds Test, as defined in the Master Revenue Bond Resolution.

The Metropolitan Act also provides two additional limitations on indebtedness. The Act provides for a limit on general obligation bonds, water revenue bonds and other indebtedness at 15 percent of the assessed value of all taxable property within Metropolitan's service area. As of December 31, 2015, outstanding general obligation bonds, water revenue bonds and other evidences of indebtedness in the amount of \$4.35 billion represented approximately 0.18 percent of the FY 2015/16 taxable assessed valuation of \$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 the bonds equals at least 100 percent of the aggregate amount of revenue bonds outstanding following the issuance of the bonds. The net assets of Metropolitan at June 30, 2015 were \$6.9 billion. The aggregate amount of revenue bonds outstanding as of December 31, 2015 was \$4.24 billion.

Metropolitan has also established its own policy regarding debt management. The purpose is to maintain a balance between current funding sources and debt financing to retain Metropolitan's financing flexibility. Flexibility allows Metropolitan to use a variety of revenue or debt-financing alternatives, including issuing low-cost variable rate and other revenue supported obligations.

Metropolitan's debt management policy is to:

- Maintain an annual revenue bond debt coverage ratio of at least 2.0 times coverage;
- Maintain an annual fixed charge coverage ratio of at least 1.2 times coverage;
- Limit debt-funded capital to no more than 40 percent of the total capital program over the ten-year planning period; and
- Limit variable rate debt such that the net interest cost increase due to interest rate changes is no more than \$5 million, and limit the maximum amount of variable rate bonds to 40 percent of outstanding revenue bond debt (excluding variable rate bonds associated with interest rate swap agreements).

In order to comply with the debt management policy, Metropolitan has taken the following measures:

Revenue Bond Debt Coverage Ratio

This policy ensures that Metropolitan has sufficient annual operating revenues to pay its operating expenses and meet its debt service obligations on its revenue bonds and other senior debt. The revenue bond debt coverage ratio is defined as Metropolitan's net operating revenue (current year's operating revenue less the current year's operating expenses) divided by the current year's debt service on all revenue bonds and other senior debt. The target is 2.0 times. In FY 2016/17 and FY 2017/18, the projected debt coverage ratio is 1.60 and 1.60 times, respectively.

Fixed Charge Coverage Ratio

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 to account for Metropolitan's recurring capital costs for the State Water Contract, which are funded after debt service on revenue bonds and other parity obligations. 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. Metropolitan's fixed charge coverage ratio target is 1.2 times. In FY 2016/17 and FY 2017/18, the projected debt coverage ratio is 1.30 and 1.30, respectively. These levels help maintain strong credit ratings and access to the capital markets at low cost.

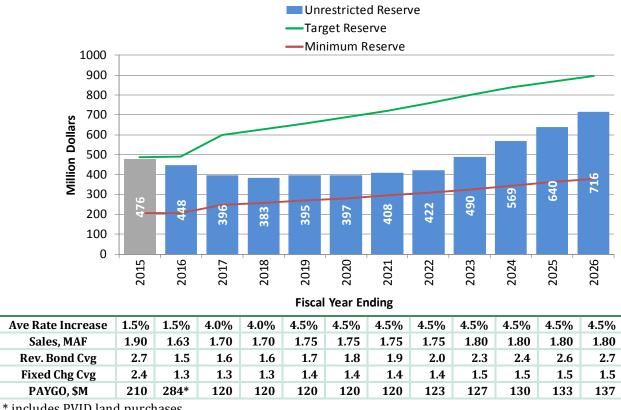
BUDGET HIGHLIGHTS

The budget for Capital Financing is decreasing from the FY 2015/16 budget due to lower CIP expenditures overall. The FY 2017/18 Capital Financing budget is higher than FY 2016/17 as new debt is issued to finance the CIP. Lower overall Capital Financing costs provide increased financial flexibility and resiliency.

TEN-YEAR FINANCIAL FORECAST

The ability to ensure a reliable supply of high quality water for Metropolitan's 26 member agencies depends on Metropolitan's ongoing ability to fund operations and maintenance, maintain and augment local and imported water supplies, fund replacements and refurbishment of existing infrastructure, and invest in system improvements. This ten-year plan builds on the biennial budget to support long range resource, capital investment and operational planning. As such, it includes a forecast of future costs and the revenues necessary to support operations and investments in infrastructure and resources that are derived from Metropolitan's planning processes while conforming to Metropolitan's financial policies. These financial policies, which address reserve levels, financial indicators, and capital funding strategies, ensure sound financial management and fiscal stability for Metropolitan.

Projected Financial Indicators



^{*} includes PVID land purchases

The figure above summarizes the financial metrics of the Ten-Year Financial Forecast. Metropolitan projects that the fixed charge coverage ratio will meet the board-established targets throughout the ten-year period. Revenue bond coverage will meet target in FY 2021/22. Reserve levels will be above minimums as established by board policy; PAYGo expenditures are set at a level that is consistent with the board policy adopted in 2014 that PAYGo expenditures would be funded from revenues, with the proposed amount set at

60 percent of the Capital Investment Plan (CIP); and projected rate increases are adequate to cover costs with moderated changes from one year to another.

The estimated overall rate increases result from increasing investments for the State Water Project (SWP) and the California Water Fix, investments in reliability through conservation and local resources, investments to maintain the conveyance and distribution system, and increasing operating and maintenance costs. Annual expenditures are expected to increase from \$1.7 billion in FY 2016/17 to \$2.4 billion by FY 2025/26, or an annual average increase of about 4.0 percent. Metropolitan's share of the costs for the California Water Fix is expected to increase to about \$246 million by FY 2025/26. During this same period, capital investments are expected to be about \$2.1 billion. To finance these capital investments, the ten-year forecast anticipates funding \$1.2 billion of the CIP from water sales revenues, or PAYGo. The balance of the CIP, or \$0.9 billion, would be financed by issuing revenue bond debt, either fixed or variable.

Planning is necessary for Metropolitan to successfully fund the many investments necessary to meet the challenges facing the region over the next ten years with manageable rate increases. Among the more significant challenges are:

- Investing in the elements of the 2015 IRP Update to ensure reliable water supplies for Metropolitan's service area and preparing for uncertainty.
- Continuing to provide supply reliability through a diversified portfolio of actions to stabilize and maintain imported supplies.
- Meeting future growth through increased water conservation and the development of new local supplies, while protecting existing supplies, to achieve higher retail water use efficiency, in compliance with state policy.
- Pursuing a comprehensive transfer and exchange strategy.
- Building storage in wet and normal years to manage risks and drought.
- Funding an estimated \$2.1 billion capital program that provides projects meeting water quality, reliability, stewardship and information technology directives.

ASSUMPTIONS FOR THE TEN-YEAR FORECAST

The following table summarizes key assumptions that underlie the ten-year forecast.

Fiscal Year Ending	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Sales, MAF	1.70	1.70	1.75	1.75	1.75	1.75	1.80	1.80	1.80	1.80
CRA diversions, MAF	1.01	1.04	1.06	1.08	1.07	1.06	1.06	1.06	1.06	1.04
SWP allocation, %	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%
CIP, \$M	200	200	200	200	200	205	211	217	222	228
PAYGO, \$M	120	120	120	120	120	123	127	130	133	137
Conservation, \$M	27	32	38	38	38	38	38	38	38	38
CA Water Fix, \$M	-	-	20	38	63	96	133	169	206	246
Inflation, %	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%	2.25%
Interest on investments, %	1.25%	1.30%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%	1.70%
Interest rate, fixed bonds, %	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
Interest rate, variable bonds, %	0.45%	0.80%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%

Metropolitan's principal sources of water supplies are the SWP and the Colorado River. Metropolitan receives water delivered from the SWP under State Water Contract (SWC) provisions, including contracted supplies, use of carryover storage in San Luis Reservoir, and surplus supplies. 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. The Supply Programs supplement these SWP and Colorado River supplies. The SWP and Colorado River sources derive from two different hydrologic regions, which have helped buffer shortages. The ten-year forecast assumes an average hydrology on both regions. Together with Metropolitan's Supply Programs, dry periods in either region can be managed.

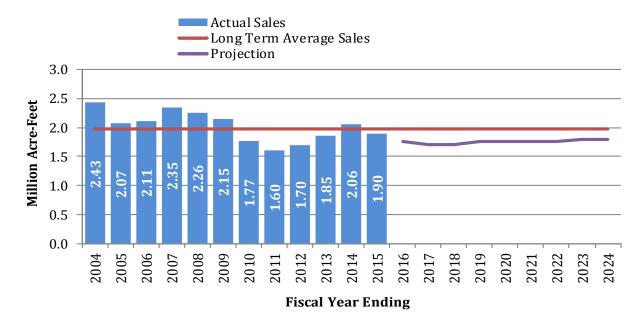
The CIP has been further reduced from prior forecasts to maintain affordability throughout the ten-year period, reduce debt service, and provide headroom to absorb the additional costs of the California Water Fix. CIP projects have been carefully reviewed, scored and ranked to ensure that only the projects necessary to deliver water reliably and safely while meeting all regulatory requirements are included.

The inflation factor is based on forecasts by economists and is applied to Metropolitan's O&M expenses, including labor, chemicals, and other O&M expenses. The interest rate applicable to Metropolitan's investment portfolio is based on an analysis of the current forward curve for investments over a ten-year period. This interest rate forecast informs the interest rate applicable to variable rate bonds. The interest rate for fixed rate bonds is also based on forecasts.

WATER SALES FORECAST

Water sales revenue provides approximately 80 percent of the revenues necessary to support Metropolitan's capital and operating costs. The 2015 IRP Update provides the basis for the water sales forecast over the ten years. It is expected that demand for Metropolitan supplies will remain relatively flat over the ten-year period, from 1.70 million acre-feet in 2016/17 to 1.85 million acre-feet by 2025/26. This forecast includes the San Diego County Water Authority exchange agreement (exchange agreement) water deliveries. The 2015 IRP Update contemplates continued investment in local resources and retail and regional conservation measures to meet state policy regarding water use efficiency. By 2025/26, conservation and water efficiency initiatives will result in a further reduction of regional water use by an estimated 163,000 acre-feet, which reflect efforts to meet state policy to reduce per capita retail water use by 20 percent by 2020. Local resource augmentation will result in approximately 157,000 acre-feet of additional local supply, including production already anticipated from existing programs. These local supplies and increased conservation and water use efficiency reduce the need to import water and reduce expected water sales by Metropolitan.

The figure below shows historic and forecast water sales, including the exchange agreement water. Long-term, Metropolitan's sales have averaged just under 2.0 million acre-feet. As noted above, expected sales are forecast to be below this average at 1.85 million acre-feet by 2025/26. Under changed economic, climatic and hydrologic conditions, sales over the next ten years could range between 1.5 million acre-feet and 2.0 million acre-feet 80 percent of the time.



SOURCES OF FUNDS

Revenues

Through 2025/26, receipts from rates and charges, which include the RTS, Capacity Charge and water sales revenues, collected from the member agencies will account for approximately 92 percent of total revenues. Total revenues are projected to increase from about \$1.6 billion in 2016/17 to \$2.5 billion in 2025/26. This increase is almost entirely attributed to increases in water rates and charges.

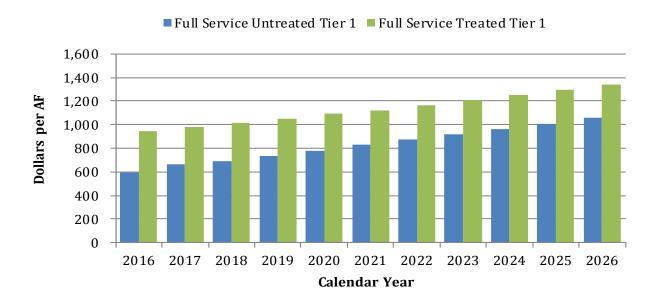
Water Rates and Charges

The table below shows the estimated unbundled water rates and charges under the current rate structure. Components of the rate structure may increase at different rates depending on the costs recovered. The full-service treated Tier 1 water rate is estimated to be approximately \$1,344 per acre-foot by January 1, 2026, compared to \$942 per acre-foot on January 1, 2016, an average increase of 3.6 percent per year over the ten-year period.

Rates & Charges Effective January 1st	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Tier 1 Supply Rate (\$/AF)	\$156	\$201	\$209	\$214	\$226	\$238	\$245	\$250	\$261	\$273	\$285
Tier 2 Supply Rate (\$/AF)	\$290	\$295	\$295	\$295	\$295	\$295	\$295	\$295	\$295	\$295	\$295
System Access Rate (\$/AF)	\$259	\$289	\$299	\$320	\$335	\$358	\$383	\$412	\$440	\$469	\$499
Water Stewardship Rate (\$/AF)	\$41	\$52	\$55	\$59	\$60	\$61	\$61	\$62	\$62	\$62	\$62
System Power Rate (\$/AF)	\$138	\$124	\$132	\$145	\$162	\$178	\$187	\$193	\$198	\$204	\$210
Full Service Untreated Volumetric Cost (\$	S/AF)										
Tier 1	\$594	\$666	\$695	\$738	\$783	\$835	\$876	\$917	\$961	\$1,008	\$1,056
Tier 2	\$728	\$760	\$781	\$819	\$852	\$892	\$926	\$962	\$995	\$1,030	\$1,066
Treatment Surcharge (\$/AF)	\$348	\$313	\$320	\$315	\$309	\$288	\$288	\$288	\$288	\$288	\$288
Full Service Treated Volumetric Cost (\$/A	AF)										
Tier 1	\$942	\$979	\$1,015	\$1,053	\$1,092	\$1,123	\$1,164	\$1,205	\$1,249	\$1,296	\$1,344
Tier 2	\$1,076	\$1,073	\$1,101	\$1,134	\$1,161	\$1,180	\$1,214	\$1,250	\$1,283	\$1,318	\$1,354
Readiness-to-Serve Charge (\$M)	\$153	\$135	\$140	\$143	\$148	\$156	\$168	\$182	\$196	\$211	\$228
Capacity Charge (\$/cfs)	\$10,900	\$8,000	\$8,700	\$9,000	\$9,300	\$9,700	\$10,000	\$10,500	\$11,100	\$11,100	\$11,300

The following figure shows the volumetric cost per acre-foot for Tier 1 Full Service untreated water and Tier 1 Full Service treated water. A proposal will be presented to the Board for consideration to address fixed cost recovery of Treatment costs which are currently recovered through a volumetric rate.

Volumetric Cost, \$ AF



<u>Property tax revenue</u> is expected to increase from \$98.3 million in FY 2016/17 to \$120.1 million in FY 2025/26. This projection assumes the Board maintains the ad valorem tax rate at .0035 percent of assessed valuations, by suspending the limit under MWD Act Section 124.5, and assessed value increases by 2.5 percent per year. By FY 2025/26 almost all of the revenues are used to pay SWP costs, which would include Metropolitan's share of the California Water Fix costs.

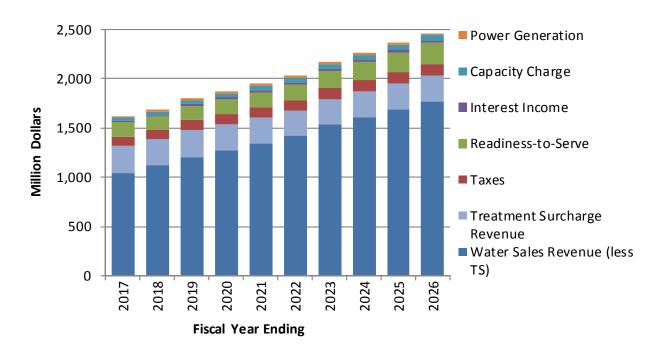
<u>Power sales</u> from Metropolitan's hydroelectric power recovery plants are projected to average about \$18.5 million per year over this ten-year period. Metropolitan has 16 small hydroelectric plants on its distribution system. The combined generating capacity of these plants is approximately 122 MW. These revenues are dependent on the amount of water that flows through Metropolitan's distribution system and the price paid. Power from some of the plants is sold under existing contracts that are priced significantly higher compared to the prices currently being offered for renewable power.

Benefits from the hydroelectric plants' environmental attributes including the Renewable Energy Credits (RECs) are included in the existing contracts and for the Etiwanda Power Plant. Renewable Portfolio standard (RPS) California Energy Commission certification for the DVL units was received in 2009; the associated RECs are sold on an unbundled basis.

Interest income is projected to increase from \$13.6 million in FY 2016/17 to \$28.3 million in FY 2025/26 as a result of increased balances and higher average returns of 1.25 percent to 1.7 percent from FY 2016/17 to FY 2025/26. Metropolitan earns interest on invested fund balances and uses this income to reduce the costs that must be recovered through rates and charges. These invested funds also act as a partial hedge against changes in interest rates on Metropolitan's variable rate debt obligations. Interest income will vary over the ten-year forecast period as interest rates and cash balances available for investments will fluctuate. Miscellaneous income includes items like leases and late fees and is forecasted to increase from \$12.0 million in FY 2016/17 to \$15 million in FY 2025/26.

Forecasted revenues by major category are shown in the figure below.

Revenue Forecast, \$ millions



Other Funding Sources

Other sources of funds include withdrawals from bond construction funds, Refurbishment and Replacement (R&R) Fund, General Fund, Water Stewardship Fund (WSF), Treatment Surcharge Stabilization Fund (TSSF), Water Rate Stabilization Fund (WRSF), Revenue Remainder Fund, and working capital borrowing.

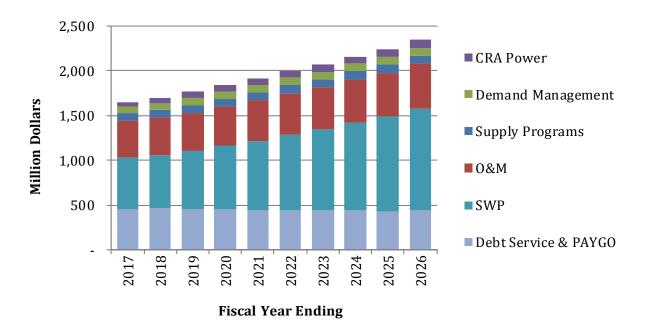
USES OF FUNDS

Over the next ten years, total annual expenditures are projected to range from \$1.7 billion to \$2.4 billion.

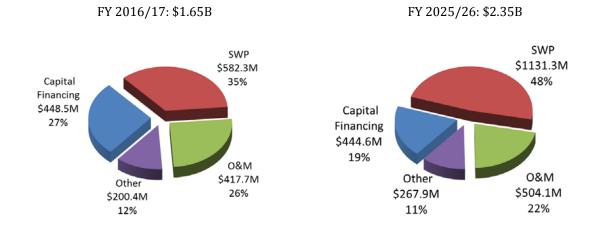
Expenses

Expenses are grouped into six major categories: SWP, 0&M, demand management programs, CRA power costs, supply programs, and capital financing. The first figure below illustrates the general trends in expenses over the ten-year period from FY 2016/17 to FY 2025/26. The second figure following shows the comparison of FY 2016/17 to FY 2025/26 in terms of the contribution of expenses to the total.

Expenditure Forecast, \$ millions



Expenditure Forecast, Contribution by Major Area



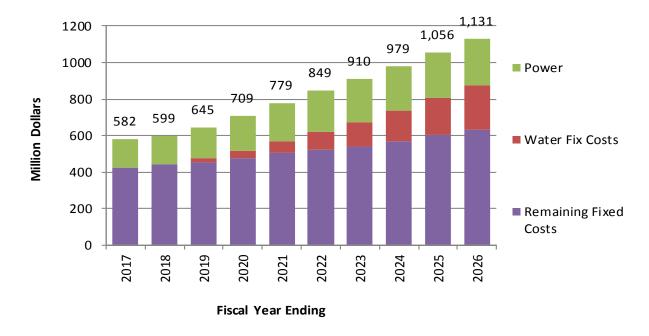
State Water Project

Metropolitan is one of 29 agencies that contract with the State of California for service from the SWP. Metropolitan is obligated to pay its share of the capital and minimum operations, maintenance, power, and replacement charges of the SWP regardless of the amount of water actually received. In addition, Metropolitan pays the power costs to convey the water. The ten-year forecast assumes that SWC annual costs, including power, will increase from \$582 million in FY 2016/17 to \$1,131 million in 2015/26, as shown in the figure below. SWC costs account for 35 percent of Metropolitan's expenditures in FY 2016/17, growing to 47 percent in FY 2025/26, primarily due to the California Water Fix costs. These costs account for \$246 million in FY 2025/26. Water supply benefits from the California Water Fix are realized outside the ten-year period of the forecast, as are operations, maintenance and energy costs. The remainder of the fixed costs is based upon information provided by the Department of Water Resources, and is associated with Transportation Capital and Minimum Operations & Maintenance, and the Delta Water Supply Capital and Minimum Operations & Maintenance. Variable SWP power costs are projected to gradually increase over the ten-year period.

Power costs will vary depending on the price of electricity, total system deliveries, storage operations, and the amount of water pumped on the SWP. SWP variable power costs are projected to increase about 6.2 percent per year over the ten-year forecast period. Increasing costs affecting the SWP include the cost of emissions allowances, adding renewable energy to the SWP power portfolio, and using the California Independent System Operator grid to transmit power from generation sources to the SWP load locations. The SWP owns generating resources, including the Hyatt complex, recovery generation units on the Aqueduct, and a contract for power from the Kings River Conservation District's Pine Flat generating facility. The SWP is a participant in the Lodi Energy Center, a natural gas-fired combined cycle generating facility located in Lodi, California, and operated by the Northern California Power Agency. The SWP has acquired renewable resources. Additional resources necessary to meet the balance of the project's energy requirements are obtained from the wholesale energy market, which exposes the SWP to wholesale energy market price volatility. Net flows through the SWP that incur power are expected to average about 1.0 MAF per year.

The total SWC costs are shown in the figure below. The SWP is described under the General District Requirements section of the Biennial Budget.

SWP Forecast, \$ millions



Operations and Maintenance

0&M costs in FY 2025/26 are projected to be \$504 million. This represents an average annual increase of 2.1 percent from FY 2016/17. During this time frame, inflation is assumed to be 2.25 percent. The ten-year forecast assumes Metropolitan continues to fully fund the annual required contribution to meet future retiree medical costs (Other Post-Employment Benefits, or OPEB) and retirement benefits.

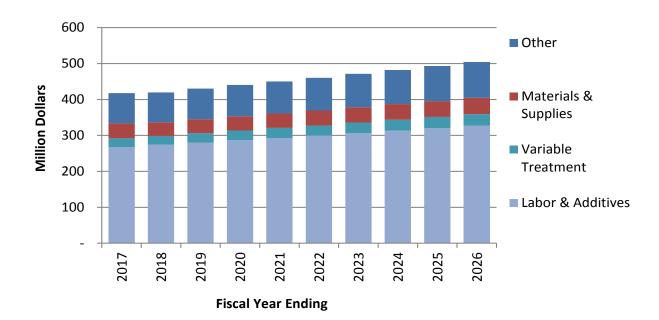


Figure 14. O&M Forecast, \$ millions

Demand Management

Demand management costs include funding for the Local Resource Programs (LRP) and the Conservation Credit Program (CCP) and are projected to increase from \$75.1million in FY 2016/17 to \$84.5 million in FY 2025/26. The LRP costs are projected to be fairly flat over the ten-year period at about \$45.0 million per year. As the yield from existing LRP projects receiving incentives decreases, new projects are expected to receive funding. The CCP costs are projected to increase from \$27.0 million in FY 2016/17 to \$38 million in FY 2018/19, and remain flat through the remainder of the ten-year period. This program provides continued funding of residential, commercial, and outdoor conservation programs.

Demand Management programs are described under the General District Requirements section of the Biennial Budget.

CRA Power Costs

CRA Power costs are projected to increase from \$46.6 million in FY 2016/17 to \$89.7 million in FY 2025/26. Power costs will vary depending on the price of electricity, Metropolitan's resource portfolio to meet electricity needs, storage operations, and the amount of water pumped on the CRA. Due to the expiration of the SCE Service and Interchange Agreement, Metropolitan will be buying more supplemental power and will have exposure to market prices.

Power costs are described under the General District Requirements section of the Biennial Budget. Colorado River diversions are expected to average about 1.0 MAF over the ten-year period, slightly more than deliveries as water is stored.

Supply Programs

Supply programs increase slightly over the ten-year period from \$78.7 million in FY 2016/17 to \$93.7 million in FY 2025/26. The estimates represent expenditures for expected conditions. If extreme weather conditions are experienced, these cost estimates could be much higher or lower. If higher than normal demand is coupled with lower than normal supply, supply program costs could be significantly higher.

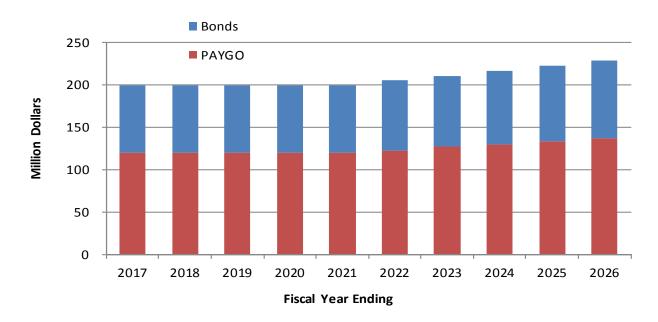
A description of Metropolitan's Supply Programs is provided under the General District Requirements section of the Biennial Budget.

Capital Investment Plan

The ten-year projected CIP through FY 2025/26 is estimated at \$2.1 billion. The CIP continues to reflect the deferral of facility expansion projects. The CIP focuses on projects that enhance reliability while focusing on necessary refurbishment and replacement of aging infrastructure. Accordingly the O&M impact from the resulting CIP is negligible. Without this emphasis on repair and replacement of aging facilities O&M expenses could potentially be much higher.

The following figure shows the funding source for the ten-year CIP.

CIP Ten-Year Forecast and Funding Sources, \$ millions



Capital Financing Options

The CIP will be funded from a combination of bond proceeds and operating revenues. In order to mitigate increases in water rates, provide financial flexibility, and support Metropolitan's high credit ratings including maintaining revenue bond debt service and fixed charge coverage ratios, it is anticipated that 60 percent of the CIP will be funded from current revenues, or PAYGo. This level of PAYGo funding is appropriate given that a significant portion of future CIP projects has been identified as R&R projects. This level of PAYGo also ensures that Metropolitan meets its coverage targets by generating a margin of revenues over operating and debt expenditures. The additional revenue required to meet Metropolitan's revenue bond debt service coverage target of 2.0 times and fixed charge coverage of 1.2 times is available to fund the CIP. PAYGo funding throughout the ten-year horizon of the planning period ensures that current customers are always

contributing funds towards the capital investments they are benefiting from, and not deferring these costs entirely to future generations of ratepayers.

Bond funded expenditures will include a combination of variable and fixed rate debt. Debt has been structured to mitigate near-term rate impacts and smooth out long-term debt service. The principal advantage of variable rate debt is the opportunity for a lower interest cost. Normally, short-term interest rates are lower than long-term interest rates for debt of comparable credit quality. If interest rates remain constant, Metropolitan will generally have significantly lower interest costs on variable rate debt than on fixed rate debt, even after remarketing and liquidity facility costs. Also, if interest rates decline, Metropolitan will benefit from lower interest costs without the necessity or cost of a refunding. If interest rates rise, variable rates could stay lower than the fixed rate originally avoided, and the longer the variable rate debt is outstanding at favorable spreads, the higher the break-even point becomes on fixed rate debt. Variable rate debt is used to mitigate interest costs over the long term, and provides a natural hedge against changes in investment earnings: when interest rates are high, interest costs on variable rate debt is higher but so are earnings from Metropolitan's investment portfolio. When interest rates are low, interest earnings are lower, but so are variable rate interest costs.

Fixed rate debt holders generally require some form of "call protection." Typically, fixed rate bonds are only redeemable a given number of years after their issuance and if the issuer pays a prepayment premium. Because the interest rate on variable rate debt is periodically reset, call protection is not important to variable rate debt holders. Variable rate debt, therefore, may generally be prepaid without premium on any date on which the interest rate is changed or on any interest payment date.

However, variable rate debt does have risks. These risks include:

- Rising interest rates. Because future interest rates are unknown, the costs of capital improvements financed with variable rate debt are more difficult to estimate for revenue planning purposes.
 Significant interest rate increases could cause financial stress.
- Liquidity facility renewal risk. Variable rate debt normally requires a liquidity facility to protect the investors and issuers against "puts" of a large portion or all of the debt on a single day. Liquidity facilities generally do not cover the full term of the debt. If an issuer's credit declines or the liquidity facility capacity is not available, the issuer runs the risk of not being able to obtain an extension or renewal of the expiring liquidity facility. In that event, the issuer may have to retire the debt or convert it to fixed rate debt.

In the last several years, Metropolitan has issued self-liquidity debt. 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 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. So, 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 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 revolving credit agreements with which it may make borrowings for the purpose of paying the purchase price of self-liquidity bonds.

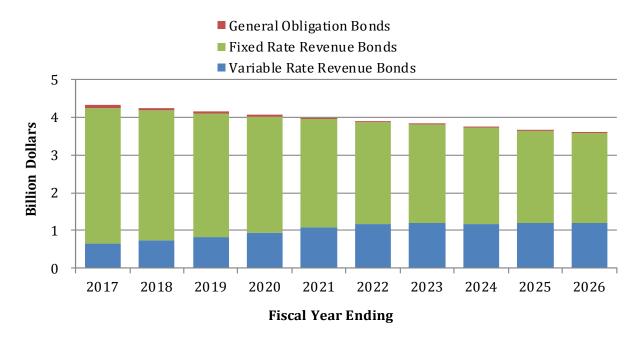
Sales of variable rate debt issues are more complex than fixed rate debt issues. Larger issuers often issue a portion of their debt as variable rate debt. Also, if construction costs are uncertain a borrower can use variable rate debt initially and convert to fixed rate debt in the amount needed after construction is completed.

Debt Financing

It is anticipated that there will be about \$2.1 billion of capital expenditures over the ten-year period. Of this, \$0.9 billion, or 40 percent of future capital expenditures, are anticipated to be funded by debt proceeds. Outstanding bond debt, including revenue and GO bonds, as of December 31, 2015 is \$4.35 billion. The net assets of Metropolitan at June 30, 2015 were \$6.9 billion. Metropolitan may not have outstanding revenue bond debt in amounts greater than 100 percent of its equity. As of June 30, 2015, the debt to equity ratio was 63 percent.

Total outstanding debt is illustrated below. Total outstanding debt is estimated to be \$3.6 billion by FY 2025/26.

Outstanding Debt, \$ billions

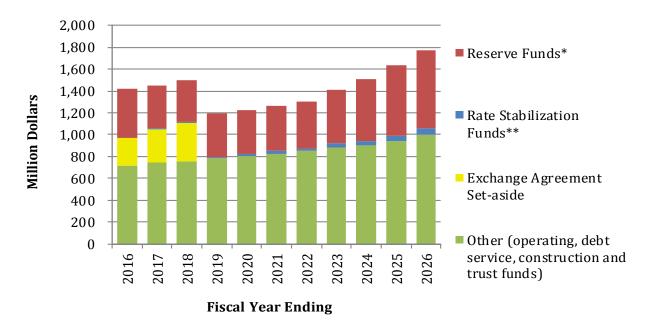


Metropolitan's variable rate debt as a percentage of total revenue bond debt is projected to increase to 31 percent over this time period as fixed rate debt is retired and new variable rate debt is issued. The appropriate amount of variable rate debt will continue to be monitored and adjusted depending on market rates, financing needs, available short-term investments, and fund levels in the investment portfolio with which variable interest rate exposure can be hedged. GO bond debt will decrease as voter approved indebtedness matures.

FUND BALANCES AND RESERVES

As shown in the figure below, over the next ten years total fund balances are projected to increase to \$1.8 billion in FY 2025/26. The Exchange Agreement Set-aside designated fund is no longer needed after 2018 by which time all appeals in the SDCWA v MWD litigation are expected to be decided.





^{*} Includes Water Rate Stabilization Fund and Revenue Remainder Fund. Working capital borrowings have been used, in part, to replace revenues that have been deposited to the Exchange Agreement Set-aside Designated Fund.

FINANCIAL RATIOS

Revenue bond debt service coverage is one primary indicator of credit quality, and is calculated by dividing net operating revenues by debt service. Revenue bond debt service coverage 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 2.0 times debt service coverage has twice the net operating revenues required to meet debt service payments. The ten-year forecast projects that Metropolitan's revenue bond coverage ratio achieves 2.0 times during the last half of the period. Metropolitan's minimum coverage policy is vital to continued strong credit ratings and low cost bond funding.

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 ten-year forecast projects that Metropolitan's fixed charge coverage ratio is at least 1.2 times over the ten-year period. These levels help maintain strong credit ratings and access to the capital markets at low cost, and provides PAYGo funding for the CIP.

^{**} Includes Water Stewardship Fund and Treatment Surcharge Stabilization Fund.

Ten-Year Financial Forecast, Sources and Uses of Funds, \$ millions

Fiscal Year Ending	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
	Proposed	Proposed	Forecast							
SOURCES OF FUNDS										
Revenues										
Taxes	98.3	100.5	102.8	105.1	107.4	109.8	112.3	114.8	117.4	120.1
Interest Income	13.6	12.4	19.1	19.8	20.5	21.1	22.3	24.1	26.1	28.3
Hydro Power	15.3	21.6	22.2	22.7	22.4	21.8	23.1	23.3	21.8	22.3
Fixed Charges (RTS & Capacity Charge)	182.3	172.7	178.8	184.0	192.0	203.5	218.2	234.5	250.3	266.7
Treatment Surcharge Revenue	272.9	261.3	275.6	273.1	261.9	251.2	259.0	258.1	257.3	256.6
Water Sales Revenue (less TS)	1,032.3	1,114.2	1,197.7	1,259.9	1,335.5	1,413.3	1,528.1	1,601.8	1,679.5	1,760.7
Miscellaneous Revenue	12.0	12.1	12.4	12.8	13.3	13.7	14.0	14.3	14.6	15.0
Bond Proceeds	89.6	79.7	79.7	79.7	79.7	79.7	89.4	79.4	89.4	109.2
Working Capital Borrowing	46.6	47.4	-	-	-	-	-	-	-	-
Sub-total Revenues	1,763.0	1,822.0	1,888.3	1,957.3	2,032.6	2,114.1	2,266.3	2,350.3	2,456.3	2,578.9
Fund Withdrawals										
R&R and General Fund	120.0	120.0	120.0	120.0	120.0	123.0	127.0	130.0	133.0	137.0
Bond Funds for Construction	-	0.3	0.3	0.3	0.3	2.8	-	7.2	0.1	-
Treatment Surcharge Stabilization Fund *	-	3.2	-	-	-	6.3	-	-	-	4.0
Decrease in Rate Stabilization Fund	94.2	23.0	-	9.8	2.9	-	-	-	-	-
Sub-total Fund Withdrawals	214.2	146.5	120.3	130.1	123.2	132.0	127.0	137.2	133.1	141.0
TOTAL SOURCES OF FUNDS	1,977.2	1,968.5	2,008.6	2,087.4	2,155.8	2,246.1	2,393.3	2,487.5	2,589.4	2,719.9
Fiscal Year Sales & Exchange (MAF)	1.68	1.70	1.74	1.76	1.75	1.75	1.79	1.80	1.80	1.80

Totals may not foot due to rounding.

* Not affected by treatment rate structure

Fiscal Year Ending	2017 Proposed	2018 Proposed	2019 Forecast	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast
USES OF FUNDS	Порозец	Порозец	rorecast							
Expenses										
State Water Contract	582.3	599.4	645.5	708.8	778.6	849.2	910.3	978.5	1,056.2	1,131.3
Supply Programs	78.7	81.7	83.8	84.4	84.8	87.8	89.6	91.6	93.7	93.7
Colorado River Power	46.6	54.4	64.6	70.1	74.0	76.5	78.8	83.0	85.7	89.7
Debt Service	328.5	344.1	338.4	334.4	320.5	317.4	308.5	311.9	298.1	307.6
Demand Management	75.1	75.9	82.0	84.5	84.5	84.5	84.5	84.5	84.5	84.5
Departmental O&M	387.7	388.7	397.5	406.4	415.6	424.9	434.5	444.3	454.3	464.7
Treatment Chemicals, Solids & Power	24.3	24.6	26.5	27.3	27.9	28.4	30.0	30.6	31.1	31.8
Other O&M	5.6	6.4	6.6	6.7	6.9	7.0	7.2	7.3	7.5	7.7
Sub-total Expenses	1,528.8	1,575.3	1,644.7	1,722.5	1,792.6	1,875.8	1,943.3	2,031.8	2,111.3	2,210.9
Capital Investment Plan	200.0	200.0	200.0	200.0	200.0	205.4	210.9	216.6	222.5	228.5
Fund Deposits										
R&R and General Fund	120.0	120.0	120.0	120.0	120.0	123.0	127.0	130.0	133.0	137.0
Revenue Bond Construction	9.6	-	-	-	-	-	5.4	-	-	17.7
Water Stewardship Fund	-	-	-	0.8	2.4	3.4	6.9	8.4	7.3	7.7
Exchange Agreement Set-aside	46.6	47.4	-	-	-	-	-	-	-	-
Treatment Surcharge Stabilization Fund *	6.7	-	10.6	9.9	2.3	-	1.2	1.8	0.2	-
Interest for Construction & Trust Funds	0.3	0.4	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.9
Increase in Required Reserves	65.1	25.4	32.7	33.6	38.0	37.8	46.1	37.7	62.8	55.6
Increase in Water Rate Stabilization Fund	-	-	0.0	-	-	0.2	51.8	60.5	51.6	61.5
Sub-total Fund Deposits	248.4	193.2	163.9	164.9	163.2	164.9	239.0	239.1	255.7	280.5
TOTAL USES OF FUNDS	1,977.2	1,968.5	2,008.6	2,087.4	2,155.8	2,246.1	2,393.3	2,487.5	2,589.4	2,719.9

Totals may not foot due to rounding.

Ten-Year Financial Forecast, Coverage Ratios and Fund Balances, \$ millions

Fiscal Year Ending	2017 Proposed	2018 Proposed	2019 Forecast	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast	2026 Forecast
RATIOS										
Fixed Charge Coverage	1.3	1.3	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5
Revenue Bond Coverage	1.6	1.6	1.7	1.8	1.9	2.0	2.3	2.4	2.6	2.7
Var. Rate Debt as % of Rev. Bond Debt	15%	18%	20%	23%	27%	30%	31%	32%	33%	33%
RESTRICTED FUNDS EOY balance										
General Fund	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0	109.0
Other	637.2	652.6	673.9	695.3	719.7	741.8	778.0	790.4	834.7	894.1
Sub-total Restricted Funds	746.2	761.6	782.9	804.3	828.7	850.8	887.0	899.4	943.7	1,003.1
UNRESTRICTED FUNDS EOY balance										
Reserve Funds (1)	395.9	383.1	394.7	397.3	408.3	422.0	489.8	569.1	639.8	716.2
Treatment Surcharge Stabilization Fund	6.7	3.4	14.0	23.9	26.1	19.9	21.0	22.9	23.1	19.1
Water Stewardship Fund	-	-	-	0.8	3.2	6.6	13.5	21.8	29.1	36.9
R&R Fund	-	-	-	-	-	-	-	-	-	-
General Fund	-	-	-	-	-	-	-	-	-	-
Exchange Agreement Set-aside	303.5	350.9	-	-	-	-	-	-	-	-
Sub-total Unrestricted Funds	706.1	737.4	408.7	422.0	437.7	448.5	524.3	613.8	692.1	772.1
TOTAL FUNDS	1,452.3	1,499.0	1,191.6	1,226.4	1,266.4	1,299.2	1,411.3	1,513.2	1,635.8	1,775.2

Totals may not foot due to rounding.
(1) includes Water Rate Stabilization Fund and Revenue Remainder Fund.

CAPITAL INVESTMENT PLAN

INTRODUCTION

The primary focus of the Capital Investment Plan (CIP) Appendix is to provide information on all capital programs and projects that are scheduled to begin or will be underway during FY 2016/17 and FY 2017/18. Scope, accomplishments, objectives and financial projections are provided for each capital program and appropriation. Every project with work planned for the two budget years is listed under the individual appropriation descriptions starting on page 203.

CIP expenditures for FY 2016/17 and FY 2017/18 are estimated to be \$246 million and \$240 million, respectively, and are planned to be funded by a combination of current operating revenues (R&R and PAYGO) and debt.

The total FY 2016/17 and FY 2017/18 CIP budget of \$486 million includes all anticipated costs for labor including administrative overhead, construction and professional services contract costs, right of way, materials, operating equipment, and incidental expenses. It does not include a contingency amount.

CIP Structure

The CIP is structured into three levels. In descending order, they are:

- 1. PROGRAM
- 2. APPROPRIATION
- 3. PROJECT

The highest level of the CIP structure is Program. Programs are comprised of one or more appropriations. There are 12 capital programs described in Table 1. Under each capital program, there is one to several appropriations, each with multiple projects.

Table 1 – Capital Programs

Program	Definition
System Flexibility/Supply Reliability	Projects under this program will enhance the flexibility and/or increase the capacity of Metropolitan's water supply and delivery infrastructure to meet current and projected service demands.
Water Quality/Oxidation Retrofit	Projects under this program will add or upgrade facilities to ensure compliance with water quality regulations for treated water at Metropolitan's treatment plants and throughout the distribution system.
Colorado River Aqueduct (CRA) Reliability	Projects under this program will replace or refurbish facilities and components on the CRA system in order to reliably convey water from the Colorado River to Southern California.

Pro	gram

Definition

Treatment Plant Reliability:

- Diemer Plant
- Iensen Plant
- Mills Plant
- Skinner Plant
- Weymouth Plant

Projects under this program will replace or refurbish facilities and components at Metropolitan's five water treatment plants in order to continue to reliably meet treated water demands.

Distribution System Reliability

Projects under this program will replace or refurbish existing facilities within Metropolitan's distribution system including reservoirs, pressure control structures, hydroelectric power plants, and pipelines in order to reliably meet water demands.

Right of Way & Infrastructure Protection

Projects under this program will refurbish or upgrade above-ground facilities and rights-of-way along Metropolitan's pipelines in order to address access limitations, erosion-related issues, and security needs.

Prestressed Concrete Cylinder Pipe (PCCP) Reliability

Projects under this program will refurbish or upgrade Metropolitan's PCCP feeders to maintain reliable water deliveries without unplanned shutdowns.

Regulatory Compliance

Projects under this program will provide for prudent use and management of Metropolitan's assets in compliance with regulations and codes, other than water quality.

Minor Capital Projects

Projects under this program will execute refurbishments, replacements, or upgrades at Metropolitan facilities that cost less than \$250,000.

Cost Efficiency & Productivity

Projects under this program will upgrade, replace, or provide new facilities, software applications, or technology that will provide economic savings that outweigh project costs through enhanced business and operating processes.

System Reliability

Projects under this program will improve or modify facilities throughout Metropolitan's service area in order to utilize new processes and/or technologies, and to improve facility safety and overall reliability. These include projects related to Metropolitan's Supervisory Control and Data Acquisition (SCADA) system and other Information Technology projects.

Regional Recycled Water Supply Program

Projects under this program are planned to demonstrate the feasibility of recycling wastewater for recharge of groundwater basins within Southern California, for development of a potential regional recycled water supply system.

CAPITAL INVESTMENT PLAN DEVELOPMENT

Background

The projects that comprise the CIP have been identified from many Metropolitan studies of projected water needs as well as ongoing monitoring and inspections, condition assessments, and focused vulnerability studies. Staff continues to study operational demands on aging facilities and has made recommendations for capital projects that will maintain infrastructure reliability and ensure compliance with all applicable water quality regulations, and building, fire, and safety codes. Staff has also studied business and operations processes and proposed projects that will improve efficiency and provide future cost savings. Additionally, several projects have been identified and prioritized to address uncertain and/or reduced allocations from the State Water Project.

CIP Development Process

The CIP is structured to reflect Metropolitan's strategic goals of providing a reliable supply of high-quality water at the lowest cost possible. As part of the CIP development process, all new and existing projects are evaluated against an objective set of criteria to ensure existing and future capital investments are aligned with Metropolitan's priorities for water supply reliability, water quality, and public safety.

A team comprised of staff from Water System Operations, Water Resource Management, Real Property Development and Management, Engineering Services, Finance, and Business Technology evaluate and rate all projects. Those projects that directly support reliability, quality, and safety are budgeted for inclusion in Metropolitan's CIP.

This rigorous evaluation process has resulted in a thorough review and assessment of all proposed capital projects by staff and managers prior to submittal to the evaluation team. Staff continues to conduct comprehensive field investigations that identify critical replacement and refurbishment projects and a variety of necessary facility upgrades related to infrastructure reliability as well as regulatory compliance. Project schedules are evaluated regularly in order to plan for necessary capital investments in infrastructure reliability and to accommodate the urgency of each project. Additionally, current demand projections that account for ongoing conservation, planned increased local supply production, and the economy, have been evaluated to ensure that demand and growth-related projects are appropriately scheduled.

An iterative process is employed to first score and rank every new and existing project, and then solicit feedback from project sponsors, customers, and resource providers in order to establish schedules and cash flow requirements. Those schedules, along with analyses of facility shutdown requirements, environmental permitting timeframes, and contracting process requirements, also enable resource managers to identify staffing needs. The final schedule and implementation plan for FY 2016/17 and FY 2017/18 are reflected in the budget and objectives for each of the individual programs described later in this document.

Project Evaluation

Before a project is included in the CIP, it is evaluated and rated against an established set of criteria. Staff is required to submit proposals for all projects that include scope, justification, alternatives, impacts of re-scheduling work for a later time, impact on operations and maintenance costs, and an estimate of total project cost. For existing projects, staff must also provide justification for continuing the project, explain any changes since inception of the project, and describe critical phases for the upcoming years. Guidelines for project proposals start on page 192. The evaluation criteria cover four characteristics or objectives for capital projects: Project Justification, Directive, Service Disruption, and Cost/Productivity/Sustainability. In addition, a multiplier is applied to a project rating to factor in a risk assessment. See page 195 for a description of each criterion and the risk multiplier.

New Projects for FY 2016/17 and FY 2017/18

As a result of the project evaluation and prioritization process, a total of 53 new projects, excluding Minor Capital projects, have been recommended by the CIP Evaluation Team to either proceed as proposed, or be staged to perform only a portion of the work in the biennial budget period, and have been incorporated into the capital programs. Ten new, unbudgeted projects totaling \$375 million were authorized by the Board during the 2014/15-2015/16 fiscal years to acquire property in Riverside, Imperial, and Los Angeles County, construct solar facilities at the Weymouth and Jensen treatment plants, replace control valves at the Garvey Pressure Control Structure, relocate a portion of the Middle Feeder in the City of Monterey Park, improve employee housing at the CRA villages, upgrade the Sepulveda Canyon Control Facility, construct a Demonstration-Scale Recycled Water Treatment Plant, and perform urgent PCCP repairs on the Sepulveda Feeder.

Figure 1 shows a breakdown of the new projects, including the ten projects described above, identified by capital program. The total estimate of expenditures for all new projects is \$513 million.

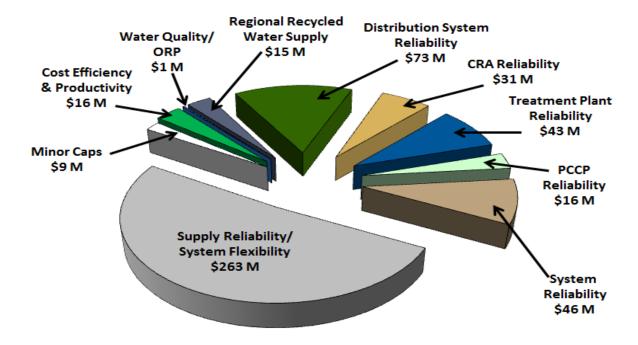


Figure 1 – New Capital Projects by Program

Total New Project Estimates – \$513 million (non-escalated)

MAJOR OBJECTIVES FOR FISCAL YEAR FY 2016/17 and FY 2017/18

Below, grouped by CIP Program, are descriptions of capital project major activities anticipated to be underway or completed over the next two fiscal years.

Water Quality/Oxidation Retrofit

Weymouth Plant Oxidation Retrofit

Complete construction, testing, and start-up of new ozonation and chemical feed facilities and commence ozone system operation.

Treatment Plant Reliability

Weymouth Plant

Complete rehabilitation of all internal components of the filters, replace the filter media, and start replacement of filter valves.

Diemer Plant

Complete rehabilitation of four flocculation/sedimentation basins and upgrade of the plant's 24 filter buildings, including valve replacement and seismic strengthening on the east side of the plant. Commence construction of seismic upgrades and control room improvements at the Administration Building.

Jensen Plant

Complete replacement of the filter valves in Module No. 1; complete the refurbishment of four LADWP lagoons; and continue upgrade of the plant electrical systems.

Distribution System Reliability

Complete the replacement of the liner and floating cover at the Palos Verdes Reservoir. Commence construction of Stage 2 relining of the Etiwanda Pipeline, the relining of 9 miles of the Orange County Feeder, and relocation of a portion of the Middle Feeder. Complete final design of the Sepulveda Canyon Control Facility improvements (Bypass Line). Commence construction of the Orange County Region Operations and Maintenance Facility.

Right of Way and Infrastructure Protection

Commence construction of pipeline protection and access improvements in the Orange County Region. Certify the Programmatic EIR for the Western San Bernardino County Region. Complete design of pipeline protection and access improvements in the Los Angeles, Riverside and San Diego County Regions.

Prestressed Concrete Cylinder Pipe Reliability

Commence pipe procurement, valve procurement, and construction to rehabilitate the remaining PCCP portions of the Second Lower Feeder. Continue annual electromagnetic inspections of all PCCP pipelines.

Colorado River Aqueduct Reliability

Complete construction of the sand trap equipment upgrades and the canal improvements to replace deteriorated concrete panels and install parapet walls to increase canal freeboard. Commence construction of the pumping plant overhead crane improvements and discharge line isolation couplings. Commence construction of 6.9 kV Switch House seismic retrofit. Complete design of the pumping plant sump system rehabilitation and main pump power cable replacement.

System Reliability

LaVerne Shop Facilities

Commence construction of remaining utility extensions and final building improvements. Commence procurement of replacement fabrication and machine shop equipment.

Information Technology

Complete the installation of communication infrastructure and equipment to replace outdated PBX-based equipment with unified Internet Protocol based technology. Complete the initial phase of upgrades to replace the control and electrical system protection facilities at the Hiram Wadsworth Pumping Plant. Complete design and begin replacement of input/output components and operating systems for approximately 300 Remote Terminal Units that monitor and control Metropolitan's treatment plants and distribution system.

Headquarters Building

Complete final design and commence construction of seismic upgrades to Metropolitan's Headquarters Building in Los Angeles.

Supply Reliability/System Flexibility

Complete final design of upgrades to the Greg Avenue Pump Station.

Regulatory Compliance

Chlorine Containment

Complete construction of the Chemical Unloading Facility chlorine containment system.

Cost Efficiency and Productivity

Continue design and installation of a new, enhanced corporate project controls and reporting system that will replace the outdated Project Management Information System. Complete design and begin construction of a 1-megawatt solar power facility at the Jensen plant.

Regional Recycled Water Supply

Complete design and begin construction of a demonstration-scale recycled water treatment plant for a Regional Recycled Water Supply Program.

Financial Projections

The CIP budget for FY 2016/17 and FY 2017/18 is estimated to be \$246 million and \$240 million, respectively, and is planned to be funded by a combination of current operating revenues (R&R and PAYGO) and debt. All of the projects in the CIP are reviewed as part of the biennial budgeting process. Considerations for timing of nearby projects and facility shutdowns, urgency, aging infrastructure, updated service demand projections, and regulatory requirements are taken into account. Estimated capital expenditures are updated on a regular basis as new projects are added, other projects are completed, construction cost estimates are refined or contracts awarded. From time to time projects that have been undertaken are delayed, redesigned or deferred for various reasons and no assurance can be given that a project in the CIP will be completed in accordance with its original schedule.

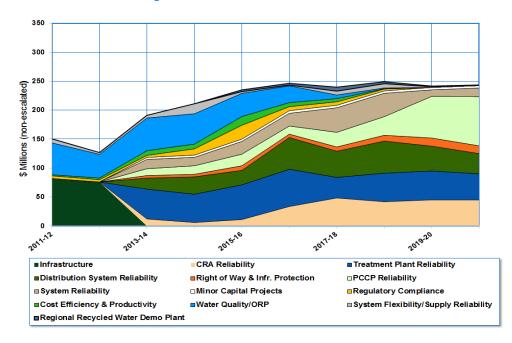
Funds required for the CIP for FY 2016/17 and FY 2017/18 have been estimated based on anticipated project progress and estimated costs for the new biennium budget period. Planned capital expenditures for FY 2016/17 are approximately \$22 million less than what was budgeted for FY 2015/16. This decrease in planned expenditures reflects a normal readjustment of project budgets throughout the previous and current fiscal years as a result of favorable bids on construction contracts and schedule changes to optimize use of resources as well as facility shutdown planning. Actual expenditures in FY 2015/16 are projected to be about \$33 million less than budgeted. Therefore, planned expenditures in FY 2016/17 of \$246 million reflect an increase from actual expenditures in FY 2015/16 of approximately \$11 million.

This increase reflects initiation and ongoing construction on several projects where design and permitting activities have been completed. Examples include liner repairs and cover replacement at the Palos Verdes Reservoir, refurbishment of the settling basins and replacement of the filter valves at the Diemer plant, rehabilitation of the filters at the Weymouth plants, rehabilitation of the sand traps at three of the CRA pumping plants, and canal improvements on the CRA. One additional project to design and construct a 1 mgd recycled water demonstration treatment plant is also planned to move into construction during FY 2016/17.

Figure 2 depicts the actual and projected capital expenditure profile, excluding the extraordinary land purchases, for the 10-year period from FY 2011/12 through FY 2020/21.

Figure 2 – FY 2016/17 – 2017/18 Biennium CIP by Program

10-year Window 2011/12 through 2020/21



HOW TO USE THIS DOCUMENT

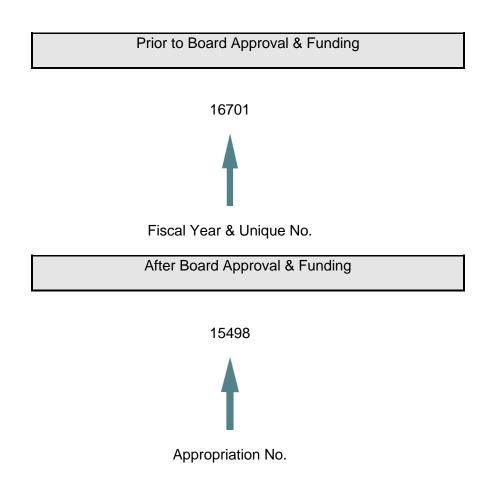
The core of this section is the Individual Appropriation Summary, which provides information for each capital project that is scheduled to begin or will be underway during FY 2016/17. The Individual Appropriation Summary is ordered by Appropriation title, starting on page 196. For assistance in locating a specific appropriation, refer to page 200.

Explanation of Capital Appropriation Numbers

Appropriation numbers are comprised of a five-digit number. The five-digit number uniquely identifies an appropriation.

If an appropriation has not yet received board approval, the first three numeric digits represent the fiscal year the appropriation was identified (e.g., "167" is FY 2016/17), the last two numeric digits uniquely identify the new appropriation placeholder number. If by board action, the authority to perform work and funding has been established, the five-digit numbers in the placeholder number change to the appropriation number. Figure 3 shows examples of the placeholder and appropriation numbers.

Figure 3 – Appropriation Number Naming Convention



Explanation of Individual Appropriation Summary

Each project planned to be underway during the FY 2016/17-2017/18 biennium is included in the Individual Appropriation Summary. The information provided reflects appropriation and project details current as of the time of publication and is subject to change.

Key Information

For each appropriation, key information is highlighted at the top of the Individual Appropriation Summary page and includes total appropriation estimate, appropriated amount, FY 2016/17 and FY 2017/18 biennial estimate, total projected cost through June 30, 2016, estimated percent complete and estimated completion date. Table 2 provides an explanation of each item.

Table 2 – Key Appropriation Information

Item	Description
Total Appropriation Estimate	The total estimate of cost from inception to completion of budgeted projects in an appropriation. It includes a contingency amount and actual expenditures if projects in the appropriation are complete or underway.
	The total appropriation estimate may have: (a) no funding authorization from the Board; (b) partial funding from the Board; or (c) complete funding from the Board.
Appropriated Amount	Amount of expenditures the General Manager is authorized by the Board to spend on projects in an appropriation. The amounts shown reflect actual appropriated amounts as of December 31, 2015.
Biennial Estimate	Estimate of expenditures from July 2016 through June 2018. It does not include a contingency amount.
Total Projected through June 30, 2016	Actual expenditures to date and estimate of expenditures through June 2016.
Estimated Percent Complete	Estimated percent of work to be completed through June 2016.
Estimated Completion Date	Fiscal year in which all of the budgeted projects in an appropriation will be completed according to the current schedule.

Guidelines for Project Proposals

Project Proposal

Sponsors are required to submit proposals for all projects to be considered for inclusion into the CIP for FY 2016/17 and FY 2017/18. The projects are evaluated, rated and prioritized based on the contents of the proposals. The following guidelines are provided to the sponsors.

Table 3 – Project Proposal Guidelines

Section	Guideline					
Appropriation and Project No. (if existing) and Project Title	If a proposed project has been previously authorized by the Board, provide the Appropriation and Project numbers along with the Project Title. If not previously authorized, provide a project title.					
Sponsoring Group	Indicate the Group sponsoring the project, as follows:					
	1) Office of General Manager 2) Water System Operations 3) Water Resource Management 4) Engineering Services 5) Business Technology 6) Real Property Development and Management 7) Office of Chief Financial Officer 8) External Affairs 9) General Counsel Department 10) General Auditor Department 11) Ethics Office					
Total Project Estimate	Show the total estimate of cost from inception to completion of a project, including administrative overhead and contingency, as applicable.					
GM Business Plan	Indicate which GM Business Plan Strategic Initiative or Core Goal the proposed project best supports.					
Current Project Phase	Indicate the phase (Study, Preliminary Design, etc.) as of the date proposal submitted.					
% Complete Now	Phase percent complete as of the date proposal submitted.					
Project Description	Describe the project scope of work.					
Changes to Existing Project	For an existing project, describe any changes to the project scope, budget, or schedule over the past two years.					
Justification	Describe the nature of the issue to be addressed by the project. What is the problem? Consider issues such as:					
	Operational flexibility					
	Water supply/facility expansion					
	Aging/deteriorated infrastructure					
	Process failure/improvement					
	Maintenance capability					
	Seismic vulnerability					
	Obsolescence (vendor support, parts, technology, etc.,)					

Section	Guideline
	Security
	Regulatory Compliance (water quality, environmental, health and safety, etc.)
	Cost savings
	Revenue generation
	Environmental benefits
	Energy savings
	Health & Safety
	What is the function of the facility/component being addressed by the proposed project? Why is it important?
	Include an explanation of how the project addresses any of the above issues and provide documentation, when applicable, to substantiate the need for the project.
Directive	Regulatory/Legal Settlement: Indicate if this is related to a written citation or directive, verbal/written directive, or in-house identification (includes environmental mitigation mandated by a MND or EIR).
	Special Initiative/Directive: Indicate if the project is specifically identified in one of the core or strategic initiatives; identified via Area Study, System Overview Study, etc.; and/or what phase(s) of the project have been authorized by the Board such as study, preliminary design, final design, or construction by contract.
Service Disruption	Describe how Metropolitan's day-to-day operations could be impacted if the project is not approved. Consider business as well as water system operations, including maintenance activities.
Cost Efficiency and Productivity	Describe potential cost, water, and/or energy savings, revenue generation, productivity gains, etc., that justify the project. Include a pay-back period.
Alternatives	Provide a brief description of any potential project scope alternatives, including any opportunities to "stage" the work. Include if it is possible to only perform a portion of a project to meet foreseeable customer needs. Consider the possibility of new technology, changing demands, as well as environmental impacts and economies of scale. Describe any reasonable projects, processes, or other initiatives available as alternatives to the project. Discuss both positive and negative aspects of each alternative. If possible, explain what other similar companies are doing about this or similar issue.
Background Information	Provide any other supplemental information (e.g. detailed history of a problem, supporting technical information, shutdown constraints, etc.) that will help in evaluating the project. This can also be attached to the proposal.
Schedule	Indicate the proposed beginning and end dates for all appropriate phases.

Coation	Guideline
Section	Guideillie

Detailed Project Estimate

Include an itemized list of all costs for the project, as follows:

- 1) Direct Labor with additives at the indicated rate
- 2) Equipment and Materials
- 3) Incidental Expenses
- 4) Professional/Technical Services (e.g., consultants)
- 5) Right-of-Way and Land Purchases (e.g., easements, fee title, escrow fees)
- 6) Operating Equipment Use and Rental
- 7) Contract Payments (e.g., construction contracts)
- 8) Administrative Overhead at the indicated rate
- 9) Contingency

All new project proposals and existing projects must include this estimate.

Post-Implementation O&M Impacts, Costs and Benefits

To the extent available/known, provide a description of the impacts, costs, and/or benefits this capital project is anticipated to have on Metropolitan's current and future 0&M expenses and services upon completion (e.g. labor, maintenance, and equipment costs; enhanced reliability; improved water quality, etc. For example, "Ozone generators will substantially increase electrical consumption by approximately \$1 million annually and the number of new pieces of equipment will require periodic maintenance per the manufacturer's recommendations beginning in FY 2015/16. PDR and future studies will provide additional detail on the overall lifecycle costs"). This is required for projects greater than \$2 million and whose planned implementation date is within the next five fiscal years.

Approvals

- 1) Person submitting and/or sponsoring the proposed project
- 2) Team manager of the person submitting and/or sponsoring the project
- 3) Unit manager of the person submitting and/or sponsoring the project
- 4) Section manager of the person sponsoring the project (e.g., all new and existing WSO-sponsored projects)
- 5) Group manager sponsoring the project (e.g., all new WSO-sponsored projects)
- 6) Project manager signs in concurrence. (e.g., Engineering and IT organizations)

Evaluation Criteria

The evaluation criteria cover four characteristics or objectives for capital projects: Project Justification, Directive, Service Disruption, and Cost/Productivity/Sustainability. In addition, a multiplier is applied to a project rating to factor in a risk assessment. Table 4 provides a description of the criteria and multiplier.

Table 4 – Evaluation Criteria and Multiplier

Criteria	Description
Justification	Assessment of the overall importance of a project. Criterion looks at whether or not a project supports the following:
	 Supply reliability Infrastructure reliability Regulatory compliance GM Business Plan Other goals (e.g., cost savings, revenue generation, and energy savings)
Directive	Assessment of whether or not a project is specifically identified in one of the core or strategic initiatives, if any permitting agency such as the California State Department of Safety of Dams has issued a directive or citation to take corrective actions, and/or the current Board authorized scope of work:
	□ Regulatory/Legal Settlement□ Special Initiative/Directive□ Board authorization
Service Disruption	Assessment of not doing a project. Criterion evaluates the following:
	 Impact to Metropolitan's business operations Impact to water system operations (e.g., system delivery and/or reliability, cascading impact on system due to failure, etc.)
Cost/Productivity/Sustainability	Assessment of whether or not a project improves cost efficiency/productivity, specifically:
	 Cost/benefit analysis Increased productivity Sustainability Customer service
Multiplier	Description
Risk Assessment	Assessment of the probability of:
	 Facility/component/process failure Workplace health and safety Water quality or environmental impact Missed opportunity (e.g., available resources, shutdown, revenue generation, cost savings, supply) Not meeting service demands

Capital Investment Plan Summary

Narratives

For each appropriation, narratives include the scope and purpose of the program, accomplishments through FY 2015/16, and objectives for FY 2016/17 and FY 2017/18. In these narratives, major activities, milestones and actions are highlighted. Following each narrative is a description for each project planned to be underway during the two-year budget period.

Capital Investment Plan Summary – Three-Year Outlook

Capital Program and Appropriations	Appn. No.	FY 2016/17	FY 2017/18	FY 2018/19
Cost Efficiency & Productivity Program		\$7,002.5	\$5,499.0	\$474.7
DVL Recreation Facilities	15334	372.3	-	-
Power Reliability and Energy Conservation	15391	4,773.4	10.1	-
Termination of Center for Water Education Ground Lease	15449	21.3	-	-
Business Operations Improvement	15484	1,395.3	2,892.5	344.3
Project Controls and Reporting System	15490	440.3	2,596.3	130.4
Colorado River Aqueduct Reliability Program		\$33,603.6	\$48,298.3	\$41,810.6
Cabazon Radial Gate Facility Improvements	15320	91.9	-	424.9
White Water Siphon Protection	15341	58.1	4,940.8	4,440.7
CRA - Conveyance Reliability	15373	7,905.6	4,192.5	2,430.3
CRA - Pumping Plant Reliability	15374	75.0	1,538.3	154.0
CRA - Electrical/Power Systems Reliability	15384	3,249.5	5,639.5	3,399.6
CRA - Reliability for FY2006/07 through FY2011/12	15438	14,585.6	13,738.8	9,041.5
CRA Main Pump Reliability	15481	1,919.4	11,030.0	9,735.0
CRA - Reliability for FY2012/13 through FY2017/18	15483	5,718.4	7,218.3	12,184.6
Distribution System Reliability Program		\$54,784.7	\$45,195.4	\$55,372.60
Conveyance and Distribution System - Rehabilitation	15377	672.0	2,950.2	17,383.4
Reservoir Cover and Replacement	15417	21,302.0	8,250.8	195.8
Dam Rehabilitation & Safety Improvements	15419	101.5	999.0	<u>-</u>

Capital Program and Appropriations	Appn. No.	FY 2016/17	FY 2017/18	FY 2018/19
Conveyance and Distribution System - Rehabilitation for FY2006/07 through FY2011/12	15441	18,266.3	10,264.7	6,121.9
Hydroelectric Power Plant Improvements	15458	589.8	2,531.5	2,377.1
Conveyance and Distribution System - Rehabilitation for FY2012/13 through FY2017/18	15480	13,853.1	19,699.1	28,849.8
Pipeline Rehabilitation and Replacement	15482	-	500.0	444.6
Minor Capital Projects Program		\$4,512.7	\$4,210.2	\$4,159.5
Capital Program for Projects Costing Less Than \$250,000 for FY2012/13 through FY2013/14	15476	1,451.1	-	-
Capital Program for Projects Costing Less Than \$250,000 for FY2014/15 through FY2015/16	15489	1,915.2	1,915.2	1,892.1
Capital Program for Projects Costing Less Than \$250,000 for FY2016/17 through FY2017/18	16810	1,146.4	2,295.0	2,267.4
System Reliability Program		\$21,886.6	\$42,559.4	\$40,287.8
Infrastructure Reliability Information System	14502	1,740.9	1,032.1	383.9
All Facilities - Security Systems Improvement	15295	378.5	380.5	-
Information Technology System - Infrastructure	15376	2,733.8	-	-
Information Technology System - Security	15378	679.9	720.1	-
LaVerne Shop Facilities Upgrade	15395	2,159.7	4,329.3	1,635.9
Water Operations Control	15467	8,626.4	15,271.7	15,232.0
Union Station Headquarters Improvements	15473	934.2	14,148.4	20,807.4
IT Infrastructure Reliability	15487	1,185.3	3,402.2	322.1
Operations Support Facilities Improvement	15495	3,447.9	3,275.2	1,906.5
Prestressed Concrete Cylinder Pipe Rehabilitation		\$14,055.10	\$25,210.43	\$32,251.20
Assess the Condition of Metropolitan's Prestressed Concrete Cylinder Pipe	15297	239.4	59.6	-
PCCP Rehabilitation and Replacement	15471	1,617.3	2,353.7	1,397.6
Sepulveda Feeder PCCP Rehab	15496	5,000.0	1,000.0	3,488.9
Second Lower Feeder PCCP Rehab	16701	7,198.4	21,797.1	27,364.7

Capital Program and Appropriations	Appn. No.	FY 2016/17	FY 2017/18	FY 2018/19
Regional Recycled Water Supply Program		\$3,077.2	\$6,817.7	\$3,337.2
Demonstration-Scale Recycled Water Treatment Plant	15493	3,077.2	6,817.7	3,337.2
Regulatory Compliance Program		\$6,989.3	\$5,959.6	\$3,262.0
Chlorine Containment and Handling Facilities	15346	6,615.3	267.0	-
CRA - Discharge Containment	15385	374.0	5,692.6	3,262.0
Right of Way & Infrastructure Protection Program		\$5,832.0	\$7,398.0	\$10,021.9
Right of Way & Infrastructure Protection	15474	5,832.0	7,398.0	10,021.9
System Flexibility/Supply Reliability Program		\$1,264.28	\$6,719.91	\$7,327.50
Water Delivery System Improvements	15488	-	5,350.8	6,542.5
Verbena Property Acquisition	15492	1,264.3	1,369.1	785.0
Treatment Plant Reliability Program		\$64,384.9	\$35,593.2	\$49,391.9
Weymouth Water Treatment Plant Improvements	15369	1,751.9	3,148.8	3,705.8
Jensen Water Treatment Plant Improvements	15371	1,977.9	-	426.0
Diemer Water Treatment Plant Improvements	15380	18,207.9	6,403.2	14,052.1
Mills Water Treatment Plant Improvements	15381	-	452.7	104.8
Diemer Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15436	9,887.7	7,178.4	8,085.8
Weymouth Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15440	-	660.9	1,678.6
Jensen Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15442	12,066.4	9,204.3	11,659.3
Mills Water Treatment Plant Improvements for FY2006/07 through FY2011/12	15452	869.6	5.6	-
Weymouth Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15477	17,404.5	2,620.9	4,476.1
Diemer Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15478	-	598.9	1,230.2
Mills Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15479	377.8	695.8	1,539.9

Capital Program and Appropriations	Appn. No.	FY 2016/17	FY 2017/18	FY 2018/19
Jensen Water Treatment Plant Improvements for FY2012/13 through FY2017/18	15486	1,841.0	4,623.7	2,433.3
Water Quality/Oxidation Retrofit Program		\$28,974.43	\$6,235.97	\$1,319.20
Skinner Water Treatment Plant Oxidation Retrofit	15388	786.8	69.8	-
Diemer Water Treatment Plant Oxidation Retrofit	15389	61.8	51.0	50.3
Weymouth Water Treatment Plant Oxidation Retrofit	15392	23,119.8	5,303.4	1,182.1
Enhanced Bromate Control	15472	5,006.1	811.8	86.8

Index – Alphabetically by Appropriation Title

Appropriation Title	Appropriation No.	Page No.
All Facilities - Security Systems Improvement	15295	203
Assess the Condition of Metropolitan's Prestressed Concrete Cylinder Pipe	15297	204
Business Operations Improvement	15484	205
Cabazon Radial Gate Facility Improvements	15320	206
Capital Program for Projects Costing Less Than \$250,000 for FY2012/13 through FY2013/14	15476	207
Capital Program for Projects Costing Less Than \$250,000 for FY2014/15 through FY2015/16	15489	208
Capital Program for Projects Costing Less Than \$250,000 for FY2016/17 through FY2017/18	16810	209
Chlorine Containment and Handling Facilities	15346	210
Conveyance and Distribution System - Rehabilitation	15377	211
Conveyance and Distribution System - Rehabilitation for FY2006/07 through FY2011/12	15441	213
Conveyance and Distribution System - Rehabilitation for FY2012/13 through FY2017/18	15480	214
CRA - Conveyance Reliability	15373	216
CRA - Discharge Containment	15385	217
CRA - Electrical/Power Systems Reliability	15384	218
CRA - Pumping Plant Reliability	15374	219
CRA - Reliability for FY2006/07 through FY2011/12	15438	220
CRA - Reliability for FY2012/13 through FY2017/18	15483	222
CRA Main Pump Reliability	15481	224
Dam Rehabilitation & Safety Improvements	15419	225
Demonstration-Scale Recycled Water Treatment Plant	15493	226
Diemer Water Treatment Plant - Improvements	15380	227
Diemer Water Treatment Plant - Improvements for FY2006/07 through FY2011/12	15436	228

Appropriation Title	Appropriation No.	Page No.
Diemer Water Treatment Plant - Improvements for FY2012/13 through FY2017/18	15478	229
Diemer Water Treatment Plant - Oxidation Retrofit	15389	230
DVL Recreation Facilities	15334	231
Enhanced Bromate Control	15472	232
Hydroelectric Power Plant Improvements	15458	233
Information Technology System - Infrastructure	15376	234
Information Technology System - Security	15378	235
Infrastructure Reliability Information System	14502	236
IT Infrastructure Reliability	15487	237
Jensen Water Treatment Plant - Improvements	15371	238
Jensen Water Treatment Plant - Improvements for FY2012/13 through FY2017/18	15486	239
Jensen Water Treatment Plant - Improvements Program for FY2006/07 through FY2011/12	15442	240
LaVerne Shop Facilities Upgrade	15395	241
Mills Water Treatment Plant - Improvements	15381	242
Mills Water Treatment Plant - Improvements for FY2012/13 through FY2017/18	15479	243
Mills Water Treatment Plant - Improvements FY2006/07 through FY2011/12	15452	244
Operations Support Facilities Improvement	15495	245
PCCP Rehabilitation and Replacement	15471	246
Pipeline Rehabilitation and Replacement	15482	248
Power Reliability and Energy Conservation	15391	249
Project Controls and Reporting System	15490	250
Reservoir Cover and Replacement	15417	251
Right of Way & Infrastructure Protection	15474	252
Second Lower Feeder PCCP Rehab	16701	254

Appropriation Title	Appropriation No.	Page No.
Sepulveda Feeder PCCP Rehab	15496	255
Skinner Water Treatment Plant - Oxidation Retrofit	15388	256
Termination of Center for Water Education Ground Lease	15449	257
Union Station Headquarters Improvements	15473	258
Verbena Property Acquisition	15492	259
Water Delivery System Improvements	15488	260
Water Operations Control	15467	261
Weymouth Water Treatment Plant - Improvements	15369	262
Weymouth Water Treatment Plant - Improvements for FY2006/07 through FY2011/12	15440	263
Weymouth Water Treatment Plant - Improvements for FY2012/13 through FY2017/18	15477	264
Weymouth Water Treatment Plant - Oxidation Retrofit	15392	265
White Water Siphon Protection	15341	266

All Facilities - Security Systems Improvement

15295

Total Appropriation Estimate: \$19,600,000 Total Projected Through June 30, 2016: \$18,200,000

Appropriated Amount: \$19,600,000 Estimated Percent Complete: 93%

Biennial Estimate: \$759,000 Estimated Completion Date: 2018

Scope

This appropriation was established to mitigate security threats district-wide and provide security improvements based upon a comprehensive threat assessment matrix developed by staff that identifies potential risks of physical, chemical and biological threats, as well as necessary modifications and improvements at all facilities. Major components of this appropriation consist of physical security improvements, facility screening, and water quality monitoring enhancements.

Purpose

To mitigate security threats district-wide and improve the security of Metropolitan personnel and property.

Accomplishments Through FY 2015/16

Through FY 2015/16, twelve projects have been completed.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Physical Security Improvements At All Facilities	13,743,159	2018	Continue implementation and oversight

Assess the Condition of Metropolitan's Prestressed Concrete 15297 Pipe

Total Appropriation \$7,870,000 Total Projected Through June 30, 2016: \$7,500,000

Appropriated Amount: \$7,870,000 Estimated Percent Complete: 95%

Biennial Estimate: \$300,000 Estimated Completion Date: 2018

Scope

This appropriation was established to perform pre-stressed concrete cylinder-pipe (PCCP) inspection on Metropolitan's 163 miles of PCCP line, perform soil studies and geotechnical investigations and to preform structural risk analysis.

Purpose

To identify areas of potential PCCP failures which could result in major property damage, personal injury, and disruption to essential services.

Accomplishments Through FY 2015/16

PCCP inspections, soil studies and geotechnical investigations authorized by this appropriation have been completed.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Structural Risk Analysis of PCCP	418,301	2017	Complete structural analysis

Business Operations Improvement

15484

Total Appropriation \$9,600,000 Total Projected Through June 30, 2016: \$4,900,000

Appropriated Amount: \$6,500,000 Estimated Percent Complete: 51%

Biennial Estimate: \$4,287,800 Estimated Completion Date: 2019

Scope

This appropriation was established to assess and implement projects ensuring customer service, efficiency/productivity, risk management and reliability of Metropolitan's business applications.

Purpose

To ensure reliability, efficiency and effectiveness of Metropolitan's business applications.

Accomplishments Through FY 2015/16

Through FY 2015/16, four projects have been completed.

Major project milestone in FY 2014/15 and FY 2015/16:

Oracle Upgrade – Completed deployment

Accounts Payable Automation – Completed deployment

Project	Total Project Estimate	Estimated Completion	Planned Activity
Budget System Replacement	1,607,997	2019	Begin design
Enterprise Content Management - Phase I	1,944,881	2019	Begin design
PeopleSoft ELM Upgrade	1,232,995	2019	Begin design

Cabazon Radial Gate Facility Improvements

15320

Total Appropriation \$5,000,000 Total Projected Through June 30, 2016: \$550,000

Appropriated Amount: \$456,000 Estimated Percent Complete: 11%

Biennial Estimate: \$91,900 Estimated Completion Date: 2022

Scope

This appropriation was established to convert the Cabazon Radial Gates Facility from an "active" spillway, which requires an operator to activate the gates, to a "passive" spillway which does not require an operator, by replacing both radial gates with a weir structure. Work includes: design, environmental documentation, purchase of materials and construction by contract.

Purpose

To divert flow in the event of an emergency shutdown of the Colorado River Aqueduct into the San Gorgonio Wash, and ultimately into the Whitewater River.

Accomplishments Through FY 2015/16

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Cabazon Radial Gate Facilities Improvement	4,954,538	2021	Complete final design

Capital Program for Projects Costing Less Than \$250,000 15476 for FY2012/13 through FY2013/14

Total Appropriation \$10,000,000 Total Projected Through June 30, 2016: \$7,900,000

Appropriated Amount: \$10,000,000 Estimated Percent Complete: 79%

Biennial Estimate: \$1,451,100 Estimated Completion Date: 2017

Scope

This appropriation was established to implement capital projects costing less than \$250,000 on the distribution system, conveyance system, and treatment plants during FY 2012/2013 - 2013/14. In addition to the scheduled projects, the need invariably arises for additional unscheduled capital projects where there is no viable alternative but to perform the work. The common driver for most of the projects in this appropriation is infrastructure reliability.

Purpose

To increase operational reliability and efficiency, and decrease maintenance costs

Accomplishments Through FY 2015/16

Through FY 2015/16, twenty-nine projects have been completed.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Minor Cap FY 2012/13	9,704,000	2017	Continue design and construction of remaining projects.

Capital Program for Projects Costing Less Than \$250,000 for FY2014/15 through FY2015/16

Total Appropriation \$8,000,000 Total Projected Through June 30, 2016: \$ 2,000,000

Appropriated Amount: \$5,000,000 Estimated Percent Complete: 25%

Biennial Estimate: \$3,830,400 Estimated Completion Date: 2019

Scope

This appropriation was established to implement capital projects costing less than \$250,000 on the distribution system, conveyance system, and treatment plants during FY 2014/15 - 2015/16. In addition to the scheduled projects, the need invariably arises for additional unscheduled capital projects where there is no viable alternative but to perform the work. The common driver for most of the projects in this appropriation is infrastructure reliability.

Purpose

To increase operational reliability and efficiency, and decrease maintenance costs.

Accomplishments Through FY 2015/16

Through FY 2015/16, two projects have been completed.

Objectives for 2016/17 and 2017/18

Project	Total Project Estimate	Estimated Completion	Planned Activity
Minor Cap FY 2014/16	6,572,648	2019	Continue design and construction of remaining projects.

15489

Capital Program for Projects Costing Less Than \$250,000 for 16810 FY2016/17 through FY2017/18

Total Appropriation \$9,100,000 Total Projected Through June 30, 2016: \$ 0

Appropriated Amount: \$ 0 Estimated Percent Complete: 0%

Biennial Estimate: \$ 3,441,400 Estimated Completion Date: 2021

Scope

This appropriation was established to implement capital projects costing less than \$250,000 on the distribution system, conveyance system, and treatment plants during FY 2016/17 - 2017/18. In addition to the scheduled projects, the need invariably arises for additional unscheduled capital projects where there is no viable alternative but to perform the work. The common driver for most of the projects in this appropriation is infrastructure reliability.

Purpose

To increase operational reliability and efficiency, and decrease maintenance costs.

Accomplishments Through FY 2015/16

This is a new appropriation; no projects have been completed.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Minor Cap Appn. FY 2016/18	9,100,000	2021	Identify and evaluate projects and begin preliminary design

Chlorine Containment and Handling Facilities

15346

94%

Total Appropriation \$162,000,000 Total Projected Through June 30, 2016: \$153,000,000 Estimate:

\$162,370,000 Estimated Percent Complete:

Biennial Estimate: \$6,882,000 Estimated Completion Date: 2018

Scope

Appropriated Amount:

This appropriation was established to construct facilities that handle and contain chlorine to prevent a chlorine release and to comply with security and safety regulations; and other related facilities that handle chlorine to meet water treatment process requirements. Since its inception, new chlorine containment and handling facilities have been completed at all five water treatment plants.

Purpose

To enhance hazardous chemical safety by reducing the potential for exposure to plant personnel or the public of a release of chlorine, and ensure compliance with current California Fire Code requirements.

Accomplishments Through FY 2015/16

Through FY 2015/16, seventeen projects have been completed.

Major project milestone in FY 2014/15 and FY 2015/16:

CUF Chlorination Containment Facility - Continued construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
CUF Chlorination Containment Facility	40,045,388	2018	Complete construction

Conveyance and Distribution System - Rehabilitation

15377

Total Appropriation \$119,500,000 Total Projected Through June 30, 2016: \$70,000,000

Appropriated Amount: \$72,595,700 Estimated Percent Complete: 59%

Biennial Estimate: \$3,622,200 Estimated Completion Date: 2024

Scope

This appropriation was established to plan and implement multiple projects throughout the Distribution System. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To maintain the reliability of the distribution system through specific repair and rehabilitation projects on Metropolitan's distribution pipelines, reservoirs, and control structures.

Accomplishments Through FY 2015/16

Through FY 2015/16, forty-three projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Garvey Reservoir Sodium Hypochlorite Pump & Piping - Completed final design

Orange County Feeder Lining Repair - Began final design

Project	Total Project Estimate	Estimated Completion	Planned Activity
Orange County Feeder Lining Repair	34,267,595	2020	Begin construction
Upper Newport Bay Blow-off Structure Rehab	1,422,312	2018	Continue final design

Conveyance and Distribution System - Rehabilitation for FY2006/07 through FY2011/12

15441

Total Appropriation

\$182,700,000 Total Projected Through June 30, 2016: Estimate:

\$66,100,000

Appropriated Amount:

\$72,139,000 Estimated Percent Complete:

36%

Biennial Estimate:

\$28,531,000 Estimated Completion Date:

2022

Scope

This appropriation was established to plan and implement multiple projects throughout the Conveyance and Distribution System. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To maintain the reliability of the distribution system through specific repair and rehabilitation projects on Metropolitan's distribution pipelines, reservoirs and control structures.

Accomplishments Through FY 2015/16

Through FY 2015/16, five projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

OC-88 Pump Station Upgrades - Defined scope

Santa Ana River Bridge Seismic Upgrade - Began construction

Etiwanda Pipeline Lining Replacement - Completed Stage 1 construction; began Stage 2 construction

Collis St. Valve Replacement - Completed final design

Palos Verdes Reservoir Sodium Hypochlorite Pump - Began construction

Lake Mathews Discharge Facility Upgrades - Continued design

Orange County Feeder Relocation in Fullerton - Completed construction

	Total Project Estimate	Estimated Completion	
Project	Estillate	Completion	Planned Activity
Allen McColloch Pipeline Cathodic Protection	2,155,262	2018	Begin construction
Collis St. Valve Replacement and Repair By-Pass at station 0256+23 on the Palos Verdes Feeder	3,198,651	2017	Begin construction
DVL Inlet / Outlet Tower Debris Screen Rehabilitation	2,850,641	2018	Begin construction
Etiwanda Pipeline Lining Replacement	45,702,091	2020	Continue construction
Lake Mathews Discharge Facility Upgrades	7,289,051	2021	Begin construction
OC-88 Pump Station Upgrades	9,730,895	2019	Begin design
Orange County Feeder Cathodic Protection System Rehabilitation	758,206	2018	Begin construction
Palos Verdes Reservoir Sodium Hypochlorite Pump and Piping Replacement	3,227,400	2019	Complete construction
Santiago Lateral Sta 216+40 Butterfly Valve Replacement	1,835,170	2018	Begin construction

Conveyance and Distribution System - Rehabilitation for FY2012/13 through FY2017/18

15480

Total Appropriation

\$332,500,000 Total Projected Through June 30, 2016: Estimate:

\$23,000,000

Appropriated Amount:

\$35,110,000 Estimated Percent Complete:

7%

Biennial Estimate:

\$33,552,200 Estimated Completion Date:

2025

Scope

This appropriation was established to plan and implement multiple projects throughout the Conveyance and Distribution System. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To maintain the reliability of the distribution system through specific repair and rehabilitation projects on Metropolitan's distribution pipelines, reservoirs and control structures.

Accomplishments Through FY 2015/16

Through FY 2015/16, one project has been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Orange County C&D Team Support Facility - Completed final design

DVL East Dam Power Line Realignment - Completed final design

Sepulveda Canyon Control Facility Bypass Project - Began preliminary design

Garvey Reservoir Control Structure Valve Upgrades - Began construction

Middle Feeder Relocation for SCE Mesa Substation - Began final design

San Diego Pipeline 3 Blowoff to Pump Well Conversion – Completed construction

Upper Feeder Protection - Completed construction

Middle Feeder Blow-off Valve Replacement Sta. 782+53.16 - Completed design

Project	Total Project Estimate	Estimated Completion	Planned Activity
A-6 Venturi Meter Replacement	906,000	2018	Begin preliminary design
Conveyance and Distribution System Electrical Structures Rehabilitation	83,286,691	2025	Begin preliminary design
DVL East Dam Power Line Realignment	4,474,257	2018	Begin construction
Hollywood Tunnel North Portal Equipment Upgrades	1,574,267	2019	Complete preliminary design
Lake Skinner Area Distribution System Valve Replacement	444,475	2019	Begin preliminary design
Middle Feeder Blow-off Valve Replacement Sta. 782+53.16	1,067,123	2017	Complete construction
Middle Feeder Relocation for SCE Mesa Substation	3,383,606	2018	Begin construction
OC-76 Turnout Relocation at the Allen- McColloch Pipeline	545,252	2020	Begin preliminary design
Orange County Area Distribution System Valve Replacement	835,000	2018	Begin preliminary design
Orange County C&D Team Support Facility	10,347,420	2019	Begin construction
Orange County Distribution System - Conduit Replacement at 9 Structures	753,975	2019	Complete construction
Red Mountain Hydro Electric Plant Emergency Generator Replacement	619,500	2019	Begin design
San Dimas Power Plant Emergency Standby Generator	661,273	2019	Begin design
Santa Monica Feeder Cathodic Protection	810,999	2020	Begin preliminary design
Sepulveda Canyon Control Facility Bypass Project	48,208,393	2019	Complete final design
Service Connections CB-12 & CB-16 Turnout Valve Replacement and Electrical Upgrade	1,244,030	2018	Begin preliminary design
Skinner Bypass #1, Bypass #3, and Effluent Conduit #1 Cathodic Protection	996,274	2020	Begin preliminary design
West OC Feeder Valve Replacement	544,060	2018	Begin preliminary design
West Orange County Feeder Cathodic Protection	1,684,178	2020	Begin preliminary design
Lakeview Pipeline Repairs	126,171,723	2023	Complete final design

CRA - Conveyance Reliability

15373

Total Appropriation \$186,000,000 Total Projected Through June 30, 2016: \$89,500,000

Appropriated Amount: \$99,558,000 Estimated Percent Complete: 48%

Biennial Estimate: \$12,098,100 Estimated Completion Date: 2025

Scope

This appropriation was established to plan and implement multiple projects throughout the Colorado River Aqueduct Conveyance System. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To ensure the reliability and operational efficiency of the Colorado River Aqueduct.

Accomplishments Through FY 2015/16

Through FY 2015/16, twelve projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

CRA - Sand Trap Equipment & Traveling Crane Rehabilitation -- Began construction

Copper Basin and Gene Dam Discharge Valve Rehab – Began final design

Project	Total Project Estimate	Estimated Completion	Planned Activity
CRA - Sand Trap Equipment & Traveling Crane Rehab	12,640,515	2018	Complete construction
Copper Basin and Gene Dam Discharge Valve Rehab	6,267,239	2020	Begin construction

CRA - Discharge Containment

15385

Total Appropriation \$19,800,000 Total Projected Through June 30, 2016: \$6,400,000

Appropriated Amount: \$7,864,000 Estimated Percent Complete: 32%

Biennial Estimate: \$6,066,600 Estimated Completion Date: 2021

Scope

This appropriation was established to plan and implement multiple projects throughout the Colorado River Aqueduct. The common driver for many of the projects in this appropriation is regulatory compliance.

Purpose

To decrease risk of discharging chemicals and waste to the environment and violating regulations.

Accomplishments Through FY 2015/16

Through FY 2015/16, four projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

CRA Pumping Plant Wastewater System - Hinds & Eagle - Completed construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
CRA Pumping Plant Wastewater System - Gene & Iron	8,310,955	2019	Begin construction
CRA Pumping Plant Wastewater System - Intake	1,646,740	2019	Begin final design

CRA - Electrical/Power Systems Reliability

15384

Total Appropriation \$48,600,000 Total Projected Through June 30, 2016: \$20,000,000

Appropriated Amount: \$22,725,000 Estimated Percent Complete: 41%

Biennial Estimate: \$8,889,000 Estimated Completion Date: 2023

Scope

This appropriation was established to plan and implement multiple projects throughout the Colorado River Aqueduct's electrical and power systems. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To ensure reliability of the power systems along the Colorado River Aqueduct by repairing or replacing aging and/or deteriorated electrical equipment/parts.

Accomplishments Through FY 2015/16

Through FY 2015/16, nine projects have been completed.

Major project milestone in FY 2014/15 and FY 2015/16:

CRA Power Cable Replacement - Completed preliminary design

Project	Total Project Estimate	Estimated Completion	Planned Activity
CRA Bank Transformer Reliability	12,669,477	2023	Begin preliminary design
CRA Over-Current Relay Replacement	814,707	2017	Begin construction
CRA Pumping Plant - Auxiliary Power System Rehabilitate/Upgrades	3,520,300	2020	Begin preliminary design
CRA Power Cable Replacement	11,759,448	2019	Complete final design

CRA - Pumping Plant Reliability

15374

Total Appropriation \$25,500,000 Total Projected Through June 30, 2016: \$23,600,000

Appropriated Amount: \$24,467,000 Estimated Percent Complete: 93%

Biennial Estimate: \$1,613,300 Estimated Completion Date: 2019

Scope

This appropriation was established to plan and implement multiple projects at the five Colorado River Aqueduct pumping plants. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To rehabilitate and/or replace aging equipment at the pumping plants to ensure reliability.

Accomplishments Through FY 2015/16

Through FY 2015/16, fifteen projects have been completed.

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
CRA Delivery Line Expansion Joint Refurbishment	2,779,470	2019	Complete final design

CRA - Reliability for FY2006/07 through FY2011/12

15438

Total Appropriation \$110,200,000 Total Projected Through June 30, 2016: \$56,400,000

Estimate: \$30,400,00

Appropriated Amount: \$62,944,000 Estimated Percent Complete: 51%

Biennial Estimate: \$28,324,400 Estimated Completion Date: 2022

Scope

This appropriation was established to continue to implement multiple projects throughout the Colorado River Aqueduct system. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To ensure the reliability and operational efficiency of the Colorado River Aqueduct and related facilities and equipment.

Accomplishments Through FY 2015/16

Through FY 2015/16, seven projects have been completed

Major project milestones in FY 2016/17 and FY 2017/18:

CRA Intake Plant - Power & Communication Line Replacement - Continued final design

CRA Seismic Upgrade of 6.9kV Switch House Seismic Retrofit - Began final design

CRA Pump Plant Flow Meter Replacement - Continued construction

CRA Pump Plant Sump System Rehabilitation - Began final design

CRA Canal Improvements - Began construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
CRA Canal Improvements	20,677,793	2017	Complete construction
CRA Intake Plant - Power & Communication Line Replacement	2,104,536	2018	Complete final design
CRA Mile 12 Flow and Chlorine Monitoring Station Upgrades	1,312,741	2018	Complete final design
CRA Pump Plant Flow Meter Replacement	1,652,000	2017	Complete construction
CRA Pump Plant Sump System Rehabilitation	21,641,242	2019	Complete final design
CRA Seismic Upgrade of 6.9kV Switch House Seismic Retrofit	12,407,032	2019	Begin construction
Eagle Pump Plant Reservoir Spillway Gate Rehab	1,438,983	2017	Begin construction
Gene Pumping Plant - 2.4 kV Standby Diesel Engine Generator Replacement	3,016,062	2020	Complete final design
Intake Pumping Plant - 2.4 kV Standby Diesel Engine Generator Replacement	1,753,927	2020	Complete final design
Iron Mountain - 2.4 kV Standby Diesel Engine Generator Replacement	3,540,091	2019	Complete final design

CRA - Reliability for FY2012/13 through FY2017/18

15483

Total Appropriation \$67,600,000 Total Projected Through June 30, 2016: \$5,200,000

Appropriated Amount: \$4,460,000 Estimated Percent Complete: 8%

Biennial Estimate: \$12,936,700 Estimated Completion Date: 2025

Scope

This appropriation was established to implement multiple projects throughout the Colorado River Aqueduct system. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To ensure the reliability and operational efficiency of the Colorado River Aqueduct and related facilities and equipment.

Accomplishments Through FY 2015/16

Through FY 2015/16, two projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

CRA Pumping Plants Water Treatment Systems Replacement - Began design

CRA Protective Slabs - Began design

CRA Delivery Line At-Risk Expansion Joint Repairs - Began final design

Project	Total Project Estimate	Estimated Completion	Planned Activity
CRA Cut and Cover Erosion Control Upgrade	3,161,944	2019	Begin final design
CRA Delivery Line At-Risk Expansion Joint Repairs	2,146,355	2017	Begin construction
CRA Domestic Water Main Distribution Replacement	10,374,784	2023	Begin final design
CRA Protective Slabs	6,104,998	2019	Begin construction
CRA Pumping Plant Delivery Line Re- Lining	6,694,562	2019	Begin construction
CRA Pumping Plant Storage Buildings at Hinds, Eagle Mountain and Iron Mountain	6,071,937	2021	Complete final design
CRA Pumping Plants Water Treatment Systems Replacement	6,456,471	2019	Begin construction
Whitewater Tunnel No. 2 Seismic Upgrade	4,154,501	2020	Begin design

CRA Main Pump Reliability

15481

Total Appropriation \$177,200,000 Total Projected Through June 30, 2016: \$765,000

Appropriated Amount: \$950,000 Estimated Percent Complete: 0.5%

Biennial Estimate: \$12,949,400 Estimated Completion Date: 2033

Scope

This appropriation was established to continue to implement multiple projects throughout the Colorado River Aqueduct Pumping plants. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To complete rehabilitation work necessary to ensure reliability and operation performance, provide operational flexibility and prolong the useful life for the pumping plants.

Accomplishments Through FY 2015/16

Major project milestones in FY 2014/15 and FY 2015/16:

CRA Main Pumping Plant Discharge Line Isolation Bulkhead Coupling - Began final design

CRA Pumping Plants Crane Improvements – Began design

	Total Project	Estimated	
Project	Estimate	Completion	Planned Activity
CRA Main Pump & Motor Refurbishment	75,509,991	2033	Define scope
CRA Main Pump Discharge Valve Refurbishment	40,360,006	2028	Define scope
CRA Main Pumping Plant Discharge Line Isolation Bulkhead Coupling	12,602,499	2021	Begin construction
CRA Pump Plants Circulation Water Systems	14,469,998	2027	Define scope
CRA Pumping Plants Crane Improvements	7,054,999	2019	Begin Construction

Dam Rehabilitation & Safety Improvements

15419

Total Appropriation \$8,900,000 Total Projected Through June 30, 2016: \$5,000,000

Appropriated Amount: \$4,600,000 Estimated Percent Complete: 56%

Biennial Estimate: \$1,100,500 Estimated Completion Date: 2021

Scope

This appropriation was established to review the adequacy of Metropolitan's dams, evaluate risks, and identify alternative solutions to minimize risks. Under this appropriation, the seismic adequacy of dams and their appurtenant structures are being assessed, and the hydraulic adequacy of dams' spillway and hydraulic structures under up-to-date hydrologic conditions are being evaluated.

Purpose

To implement multiple projects that will facilitate monitoring, and assess stability, risks, and capacities of Metropolitan's dams and reservoirs.

Accomplishments Through FY 2015/16

Through FY 2015/16, three projects have been completed.

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
DVL Dam Monitoring System Upgrade	1,263,027	2018	Begin construction

Demonstration-Scale Recycled Water Treatment Plant 15493

Total Appropriation \$15,000,000 Total Projected Through June 30, 2016: \$690,000

Appropriated Amount: \$15,000,000 Estimated Percent Complete: 5%

Biennial Estimate: \$9,895,000 Estimated Completion Date: 2020

Scope

This appropriation was established to plan and implement a demonstration-scale recycled water treatment plant and to establish the framework of terms and conditions for development of a regional recycled water supply program.

Purpose

To enhance water supply reliability by providing a new resource that would help maintain groundwater recharge and storage for Metropolitan's service area.

Accomplishments Through FY 2015/16

This is a new appropriation; no projects have been completed.

Major project milestone in FY 2014/15 and FY 2015/16:

Water Purification Demonstration Project - Began final design

Project	Total Project Estimate	Estimated Completion	Planned Activity
Water Purification Demonstration Project	15,000,000	2020	Begin construction

Diemer Water Treatment Plant - Improvements

15380

Total Appropriation \$238,000,000 Total Projected Through June 30, 2016: \$136,000,000

Appropriated Amount: \$159,996,600 Estimated Percent Complete: 57%

Biennial Estimate: \$24,611,100 Estimated Completion Date: 2025

Scope

This appropriation was established to plan and implement multiple projects within the Diemer Water Treatment Plant. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Diemer plant.

Accomplishments Through FY 2015/16

Through FY 2015/16, sixteen projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Diemer Basin Rehabilitation - Began construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Diemer Electrical Improvements Stage 2	21,215,810	2017	Complete construction
Diemer Filter Outlet Conduit Seismic Upgrade	14,670,441	2020	Complete final design
Diemer Basin Rehabilitation	57,931,061	2021	Continue construction

Diemer Water Treatment Plant - Improvements for FY2006/07 through FY2011/12

15436

Total Appropriation \$79,500,000 Total Projected Through June 30, 2016: \$40,100,000

Appropriated Amount: \$46,719,000 Estimated Percent Complete: 50%

Biennial Estimate: \$17,066,100 Estimated Completion Date: 2021

Scope

This appropriation was established to plan and implement multiple projects at the Diemer Water Treatment Plant. The common driver for many projects in this appropriation is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Diemer plant.

Accomplishments Through FY 2015/16

Through FY 2015/16, ten projects have been completed.

Major project milestone in FY 2014/15 and FY 2015/16:

Diemer Filter Buildings Upgrades - Began East Building construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Diemer Administration Building Seismic Upgrade	5,952,449	2018	Begin construction
Diemer Filter Buildings Seismic Upgrade	28,595,794	2020	Complete East Building construction
Diemer Filter Valve Replacement	13,617,837	2019	Complete East Building construction

Diemer Water Treatment Plant - Improvements for FY2012/13 through FY2017/18

15478

Total Appropriation

\$10,400,000 Total Projected Through June 30, 2016: Estimate:

\$350,000

Appropriated Amount:

\$375,000 Estimated Percent Complete:

3%

Biennial Estimate:

\$598,900 Estimated Completion Date:

2021

Scope

This appropriation was established to plan and implement multiple projects at the Diemer Water Treatment Plant. The common driver for many projects is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Diemer plant.

Accomplishments Through FY 2015/16

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Diemer Slope Erosion Rehabilitation	1,787,510	2019	Begin preliminary design

Diemer Water Treatment Plant - Oxidation Retrofit

15389

Total Appropriation \$370,192,400 Total Projected Through June 30, 2016: \$345,000,000

Estimate:

Appropriated Amount: \$370,192,400 Estimated Percent Complete: 93%

Biennial Estimate: \$112,800 Estimated Completion Date: 2020

Scope

This appropriation was established to design and construct all systems and facilities that are required to provide ozone disinfection capability and to integrate those systems into the existing plant operations at the Diemer Water Treatment Plant.

Purpose

To reduce the level of disinfection by-products in the treated water supplied by the Diemer plant in order to meet state and federal standards and provide consistent and equitable high quality treated water to all of Metropolitan's member agencies.

Accomplishments Through FY 2015/16

Through FY 2015/16, all projects have been completed with exception of preparation of record drawings for the new ozonation facilities and completion activities.

Major project milestone in FY 2014/15 and FY 2015/16:

Diemer Southern Slope Fire Management and Landscaping - Began construction

Diemer Ozonation Facilities – Completed construction, testing, and start-up

Objectives for 2016/17 and 2017/18

Continue follow-on activities.

DVL Recreation Facilities

15334

Total Appropriation \$92,800,000 Total Projected Through June 30, 2016: \$68,200,000

Estimate:

Appropriated Amount: \$71,727,100 Estimated Percent Complete: 73%

Biennial Estimate: \$372,300 Estimated Completion Date: 2017

Scope

This appropriation was established to begin transformation of the Diamond Valley Lake property to incorporate revenue enhancement to extract value from the property while ensuring that Metropolitan's core business is protected. Current spending is aimed at completing current commitments required by the ground leases and at encouraging future development opportunities within the DVL properties, in a cost-effective manner, consistent with board-approved objectives.

Purpose

To fully implement the Metropolitan's Board directives on recreation and associated development at DVL.

Accomplishments Through FY 2015/16

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Diamond Valley Lake (DVL) East Marina Restroom Facility	426,912	2017	Complete construction

Enhanced Bromate Control

15472

Total Appropriation \$13,300,000 Total Projected Through June 30, 2016: \$3,000,000

Estimate:

Appropriated Amount: \$10,240,000 Estimated Percent Complete: 23%

Biennial Estimate: \$5,817,900 Estimated Completion Date: 2021

Scope

This appropriation was established to determine the feasibility, study, preliminary design, and construct necessary facilities for the ammonia-chlorine bromate control process at the Diemer, Jensen, Mills, Skinner, and Weymouth plants.

Purpose

To control the formation of bromate, which is a regulated disinfection by-product, during the ozonation process, and reduce chemical costs.

Accomplishments Through FY 2015/16

Through FY 2015/15, no projects have been completed.

Major project milestone in FY 2014/15 and FY 2015/16:

Weymouth Bromate Control Facilities - Began construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Weymouth Bromate Control Facilities	7,945,460	2019	Complete construction

Hydroelectric Power Plant Improvements

15458

Total Appropriation \$39,300,000 Total Projected Through June 30, 2016: \$7,500,000

Appropriated Amount: \$8,677,000 Estimated Percent Complete: 19%

Biennial Estimate: \$3,121,300 Estimated Completion Date: 2023

Scope

This appropriation was established to implement a comprehensive rehabilitation plan that will enhance infrastructure reliability, ensure compliance with regulatory requirements, improve plant efficiency, and reduce maintenance on all hydroelectric power (HEP) plants.

Purpose

To ensure reliability of Metropolitan's hydroelectric power plants.

Accomplishments Through FY 2015/16

Through FY 2015/16, two projects have been completed.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Foothill HEP Rehab	4,630,149	2019	Begin construction

Information Technology System - Infrastructure

15376

Total Appropriation \$48,541,000 Total Projected Through June 30, 2016: \$41,000,000

Appropriated Amount: \$48,541,000 Estimated Percent Complete: 84%

Biennial Estimate: \$2,733,800 Estimated Completion Date: 2017

Scope

This appropriation was established to implement multiple projects to ensure the reliability and efficiency of the Information Technology Infrastructure in support of Metropolitan's operational and business applications.

Purpose

To ensure reliability of IT infrastructure for critical business applications.

Accomplishments Through FY 2015/16

Through FY 2015/16, fifteen projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Communication Infrastructure Reliability Upgrade - Began deployment

Emergency Radio Communications System Upgrade - Began construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Communication Infrastructure Reliability Upgrade	5,714,074	2017	Complete deployment
Emergency Radio Communications System Upgrade Phase III	10,239,903	2017	Complete construction
IT Disaster Recovery Facility Environmental Upgrade	2,007,342	2017	Begin construction

Information Technology System - Security

15378

Total Appropriation \$7,000,000 Total Projected Through June 30, 2016: \$5,600,000

Appropriated Amount: \$5,906,000 Estimated Percent Complete: 80%

Biennial Estimate: \$1,400,000 Estimated Completion Date: 2018

Scope

This appropriation was established to enhance and upgrade the functionality, reliability, security and to protect against cyber threats of Metropolitan's business and SCADA systems.

Purpose

To implement technologies that provide most cost-effective and threat reducing benefits to Metropolitan with public safety and security represented at all levels.

Accomplishments Through FY 2015/16

Through FY 2015/16, seven projects have been completed.

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Cyber Security Assessment and Remediation	1,400,000	2018	Begin deployment

Infrastructure Reliability Information System

14502

Total Appropriation \$7,700,000 Total Projected Through June 30, 2016: \$0

Appropriated Amount: \$ 0 Estimated Percent Complete: 0%

Biennial Estimate: \$ 2,773,000 Estimated Completion Date: 2021

Scope

This appropriation is established to update and integrate equipment maintenance reporting tools to enhance management and tracking of assets, improve maintenance and engineering work planning, and track equipment performance data by integrating data from several information systems to support condition-based equipment maintenance and improved selection of replacement equipment.

Purpose

To improve data and information flow and processing, and provide decision making tools related to Metropolitan's major Infrastructure Reliability and Asset Maintenance initiatives.

Accomplishments Through FY 2015/16

This is a new appropriation; no projects have been completed.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Energy Management System Upgrade	482,000	2019	Begin deployment
Fuel Management System Upgrade	1,355,000	2018	Begin deployment
Maximo Mobile Computing Upgrade	502,532	2019	Begin deployment
Maximo Upgrade and Improvements	530,900	2018	Begin deployment

IT Infrastructure Reliability

15487

Total Appropriation \$18,100,000 Total Projected Through June 30, 2016: \$7,000,000

Appropriated Amount: \$9,080,000 Estimated Percent Complete: 39%

Biennial Estimate: \$4,587,500 Estimated Completion Date: 2020

Scope

This appropriation was established to implement multiple projects to ensure the reliability and efficiency of the Information Technology Infrastructure in support of Metropolitan's operational and business applications.

Purpose

To ensure reliability of IT infrastructure for critical business applications.

Accomplishments Through FY 2015/16

Through FY 2015/16, seven projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Enterprise IT Emergency Power Upgrade Project	1,455,000	2019	Begin preliminary design
Enterprise Wireless Network Upgrade (Phase One of Three)	3,555,000	2020	Begin preliminary design

Jensen Water Treatment Plant - Improvements

15371

Total Appropriation \$75,100,000 Total Projected Through June 30, 2016: \$44,200,000

Appropriated Amount: \$47,352,000 Estimated Percent Complete: 59%

Biennial Estimate: \$1,978,000 Estimated Completion Date: 2022

Scope

This appropriation was established to plan and implement multiple projects within the Jensen Water Treatment Plant. The common driver for many of the projects in this program is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Jensen plant.

Accomplishments Through FY 2015/16

Through FY 2015/16, eleven projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Jensen Treatment Plant Module 1 Filter Valve Replacement - Began construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Jensen T. P Module 1 Filter Valve Replacement	10,276,611	2017	Complete construction

Jensen Water Treatment Plant - Improvements for FY2012/13 through FY2017/18

15486

Total Appropriation

\$16,300,000 Total Projected Through June 30, 2016: Estimate:

\$1,200,000

Appropriated Amount:

\$1,375,000 Estimated Percent Complete:

7%

Biennial Estimate:

\$6,464,736 Estimated Completion Date:

2021

Scope

This appropriation was established to plan and implement multiple projects at the Jensen plant. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Jensen plant.

Accomplishments Through FY 2015/16

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Jensen Finished Water Reservoir No. 1 Cover Rehab	4,096,885	2019	Begin construction
Jensen Finished Water Reservoir No. 2 Floating Cover	4,092,489	2020	Begin preliminary design
Jensen Inlet Water Quality Enclosure	1,088,176	2018	Begin construction
Jensen Ozone Generator PLC Control & Communication Equipment Upgrade	4,784,004	2021	Begin preliminary design

Jensen Water Treatment Plant - Improvements Program for 15442 FY2006/07 through FY2011/12

Total Appropriation \$146,000,000 Total Projected Through June 30, 2016: \$28,000,000

Appropriated Amount: \$53,476,000 Estimated Percent Complete: 19%

Biennial Estimate: \$21,270,730 Estimated Completion Date: 2025

Scope

This appropriation was established to plan and implement multiple projects at the Jensen Water Treatment Plant. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Jensen water treatment plant.

Accomplishments Through FY 2015/16

Through FY 2015/16, three projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Jensen Electrical Upgrade - Began Stage 1 construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Jensen Electrical Upgrade	69,398,000	2025	Continue Stage 1 construction

LaVerne Shop Facilities Upgrade

15395

Total Appropriation \$60,900,000 Total Projected Through June 30, 2016: \$39,000,000

Appropriated Amount: \$42,180,000 Estimated Percent Complete: 64%

Biennial Estimate: \$6,489,008 Estimated Completion Date: 2022

Scope

This appropriation was established to modernize the Maintenance Support Unit facilities at La Verne and will evaluate, recommend, design and build new or remodel shop building facilities, and upgrade through refurbishment or replacement aging shop equipment.

Purpose

To modernize the machine, coatings, and fabrication shops so that they can continue to provide emergency response service, support routine maintenance throughout the District, and perform fee-for-service work for member agencies and the California Department of Water Resources (DWR).

Accomplishments Through FY 2015/16

Through FY 2015/16, three projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

La Verne Shop - Stage 4 Shop Buildings Completion and Stage 5 Shop Equipment Upgrade - Began preliminary design

Project	Total Project Estimate	Estimated Completion	Planned Activity
La Verne Shop - Stage 4 Shop Buildings Completion and Stage 5 Shop Equipment Upgrade	9,572,250	2020	Begin procurement & construction

Mills Water Treatment Plant - Improvements

15381

Total Appropriation \$8,200,000 Total Projected Through June 30, 2016: \$5,300,000

Appropriated Amount: \$5,695,000 Estimated Percent Complete: 65%

Biennial Estimate: \$ 452,661 Estimated Completion Date: 2021

Scope

This appropriation was established to plan and implement multiple projects within the Mills Water Treatment Plant. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Mills Water Treatment plant.

Accomplishments Through FY 2015/16

Through FY 2015/16, eight projects have been completed.

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Mills Basin Solids Removal Improvements	2,906,476	2021	Begin final design

Mills Water Treatment Plant - Improvements for FY2012/13 15479 through FY2017/18

Total Appropriation \$36,500,000 Total Projected Through June 30, 2016: \$2,300,000

Appropriated Amount: \$2,580,000 Estimated Percent Complete: 6%

Biennial Estimate: \$1,073,600 Estimated Completion Date: 2023

Scope

This appropriation was established to plan and implement multiple projects at the Mills plant. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Mills plant.

Accomplishments Through FY 2015/16

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Mills Finished Water Reservoir Improvement	10,283,000	2021	Begin preliminary design

Mills Water Treatment Plant - Improvements FY2006/07 through FY2011/12

15452

Total Appropriation

Estimate:

\$27,500,000 Total Projected Through June 30, 2016:

\$13,200,000

Appropriated Amount:

\$14,019,000 Estimated Percent Complete:

48%

Biennial Estimate:

\$875,251 Estimated Completion Date:

2022

Scope

This appropriation was established to plan and implement multiple projects at the Mills Water Treatment Plant. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Mills water treatment plant.

Accomplishments Through FY 2015/16

Through FY 2015/16, three projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Mills Industrial Wastewater Handling Facilities Improvements - Began construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Mills - Module Influent Flash Mix Chemical Containment	951,700	2018	Begin final design
Mills Industrial Wastewater Handling Facilities Improvements	4,578,495	2017	Complete construction

Operations Support Facilities Improvement

15495

Total Appropriation \$35,100,000 Total Projected Through June 30, 2016: \$800,000

Appropriated Amount: \$500,000 Estimated Percent Complete: 2%

Biennial Estimate: \$6,723,126 Estimated Completion Date: 2027

Scope

This appropriation was established to plan and construct site improvements at Lake Mathews, housing facilities at CRA, and seismic upgrades to operations support buildings at Metropolitan's LaVerne facility.

Purpose

To replace and/or expand support facilities to meet current and future operations and maintenance needs.

Accomplishments Through FY 2015/16

No major milestones were achieved.

CRA Housing Rehabilitation - Began assessment and design for eight new houses

Project	Total Project Estimate	Estimated Completion	Planned Activity
CRA Housing Rehabilitation	14,596,500	2027	Begin construction
Lake Mathews Sewer Improvements	2,932,000	2018	Complete final design

PCCP Rehabilitation and Replacement

15471

Total Appropriation \$59,600,000 Total Projected Through June 30, 2016: \$36,000,000

Appropriated Amount: \$72,360,000* Estimated Percent Complete: 60%

Biennial Estimate: \$3,971,000 Estimated Completion Date: 2030

Scope

This appropriation was established to plan and implement reliability projects throughout the Conveyance and Distribution System which will include structural engineering evaluation of all 163 miles of Preestressed Concrete Cylinder Pipe (PCCP), conduct pilot testing installation of fiber optic acoustic monitoring system, prepare programmatic CEQA documents to cover PCCP Rehabilitation and to initiate refurbishment and replacement projects for at-risk pipelines.

Purpose

To identify pipelines whose age, location and condition warrant refurbishment/ replacement to insure long-term reliability of Metropolitan's PCCP lines water delivery.

Accomplishments Through FY 2015/16

Through FY 2015/16, six projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Electromagnetic Inspections of PCCP Lines – Successfully inspected a protion of the Sepuilveda Feeder utilizing new system that eliminated dewatering. Completed standard electromagnetic inspections on 8 other PCCP feeders.

Second Lower Feeder PCCP Rehabilitation - Began final design

Second Lower Feeder PCCP Pipe Procurement - Began final design

Second Lower Feeder PCCP Valve Procurement - Began final design

^{*}All previously appropriated funds and expenditures for the Second Lower Feeder PCCP Rehabilitation under this Appropriation are to be transferred to Appropriation 16701.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Electromagnetic Inspections of PCCP Lines	11,059,246	2024	Continue inspections
PCCP Rehabilitation - Program CEQA	2,227,515	2023	Complete development
PCCP Rehabilitation - Program Management	15,622,980	2030	Continue development

Pipeline Rehabilitation and Replacement

15482

Total Appropriation \$94,000,000 Total Projected Through June 30, 2016: \$37,000

Appropriated Amount: \$ 0 Estimated Percent Complete: 0%

Biennial Estimate: \$500,000 Estimated Completion Date: 2040

Scope

This appropriation is established to plan and implement multiple projects throughout the Conveyance and Distribution System for the all non-prestressed concrete cylinder pipe (PCCP) lines. The projects will rehabilitate and replace at-risk pipelines, and update the appropriation estimate annually based on rehabilitation and replacement options. The common driver for all projects in this appropriation is infrastructure reliability.

Purpose

To identify pipelines whose age, location, and condition warrant rehabilitation/replacement to enhance long-term water delivery reliability.

Accomplishments Through FY 2015/16

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Reinforced Concrete and Metal Pipe Assessment	94,000,000	2040	Define scope

Power Reliability and Energy Conservation

15391

Total Appropriation \$54,900,000 Total Projected Through June 30, 2016: \$ 37,400,000

Estimate:

Appropriated Amount: \$48,897,000 Estimated Percent Complete: 68%

Biennial Estimate: \$4,780,000 Estimated Completion Date: 2018

Scope

This appropriation was established to implement multiple power and energy related projects throughout Metropolitan's system. Since its inception, several projects have been incorporated into this program and completed, including the OC-88 Energy Savings Modifications Project which modified the pump station to reduce the energy required for pumping and provides significant energy savings, and the one Megawatt (1 MW) Skinner Solar Power Facility project.

Purpose

To reduce purchased electrical energy and costs, provide sufficient and reliable power, and reduce carbon-based emissions.

Accomplishments Through FY 2015/16

Through FY 2015/16, seven projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Weymouth Solar Power Facility - Completed construction

Jensen Solar Power Facility - Completed final design

Project	Total Project Estimate	Estimated Completion	Planned Activity
Jensen Solar Power Facility	5,449,243	2018	Begin construction

Project Controls and Reporting System

15490

Total Appropriation \$4,300,000 Total Projected Through June 30, 2016: \$1,100,000

Appropriated Amount: \$1,330,000 Estimated Percent Complete: 26%

Biennial Estimate: \$3,040,000 Estimated Completion Date: 2019

Scope

This appropriation was established to replace outdated project reporting systems. Some of the tools in use today lack key fundamental capabilities, such as earned value and resource utilization reporting, and, due to the upgrades of other applications, have lost the former integration impacting timely reporting. Currently, the primary deliverable of this appropriation is the implementation of an enterprise-wide Project Controls System to provide schedule and resource management and replace the Project Management Information System (PMIS).

Purpose

To ensure the accuracy, efficiency and effectiveness for enterprise-wide project controls, scheduling, budgeting, resource management, and management reporting.

Accomplishments Through FY 2015/16

This is a new appropriation; no projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Project Controils System Replacement - Completed functional design

Project	Total Project Estimate	Estimated Completion	Planned Activity
Project Controls System Replacement	4,252,074	2019	Begin deployment

Reservoir Cover and Replacement

15417

Total Appropriation \$41,500,000 Total Projected Through June 30, 2016: \$11,400,000

Estimate:

Appropriated Amount: \$41,830,000 Estimated Percent Complete: 27%

Biennial Estimate: \$29,552,820 Estimated Completion Date: 2019

Scope

This appropriation was established to perform studies, prepare design and construction documents, and coordinate with California Department of Public Health and Division of Safety of Dams for the replacement of floating reservoir covers at multiple locations. The scope includes remove existing covers, repair reservoir gunite lining, modify structures and protective grillages on reservoir bottoms, install underdrain leakage collection systems, install new geocomposite drainage course, install new Hypalon flexible membrane liners and floating covers, and upgrade reservoir electrical systems and surface drainage to accommodate new cover dewatering pumps.

Purpose

To replace reservoir floating covers that have exceeded their useful life and are increasingly difficult to repair.

Accomplishments Through FY 2015/16

Through FY 2015/16, one project has been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Palos Verdes Floating Cover Replacement - Began Construction

Project	Total Project Estimate	Estimated Completion	Planned Activity	
Palos Verdes Floating Cover Replacement	35,480,609	2019	Complete construction	

Right of Way and Infrastructure Protection

15474

Total Appropriation \$71,200,000 Total Projected Through June 30, 2016: \$15,300,000

Estimate: \$\psi 1,200,000 \quad \text{Total Frojected Fill dugit Surie 30, 2010.} \psi 13,300,000

Appropriated Amount: \$20,700,000 Estimated Percent Complete: 21%

Biennial Estimate: \$13,230,000 Estimated Completion Date: 2022

Scope

This appropriation is established to protect Metropolitan's investment in its rights-of-way by securing and rehabilitating rights of way in a manner that will complement aesthetic qualities of communities and neighborhoods, provide adequate access and buffer area, install security measures (e.g., fencing and signage) to boundaries and restricted areas, and correct or evict encroachments and trespassers.

Purpose

To assess and resolve the known encroachments and rights-of-way gaps, develop best management practices, and install security measures.

Accomplishments Through FY 2015/16

Through FY 2015/16, no projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

 $ROWIPP\ Programmatic\ Environmental\ Documentation\ for\ the\ Orange\ County\ Operating\ Region\ -\ Completed\ development$

Project	Total Project Estimate	Estimated Completion	Planned Activity
Detailed Reliability Improvements of the Los Angeles County Operating Region	9,131,387	2022	Complete design
Detailed Reliability Improvements of the Orange County Operating Region	19,183,523	2020	Begin construction
Detailed Reliability Improvements of the Riverside & San Diego County Operating Region	18,738,558	2022	Complete design
Detailed Reliability Improvements of the Western San Bernardino County Operating Region	9,825,600	2021	Begin construction
Environmental Regulatory Agreements	690,394	2020	Begin development
ROWIPP Programmatic Environmental Documentation for the Los Angeles Co. Operating Region	950,000	2018	Complete development
ROWIPP Programmatic Environmental Documentation for the Riverside/San Diego Co. Operating Region	958,326	2018	Complete development
ROWIPP Programmatic Environmental Documentation for the Western San Bernardino County Operating Region	1,112,413	2017	Complete development
Right of Way Survey and Mapping	3,003,319	2020	Continue development

Second Lower Feeder PCCP Rehab

16701

Total Appropriation \$606,400,000 Total Projected Through June 30, 2016: \$4,200,000

Appropriated Amount: \$0* Estimated Percent Complete: 0%

Biennial Estimate: \$28,995,425 Estimated Completion Date: 2025

Scope

This appropriation was established to plan and implement projects to rehabilitate PCCP portions of the Second Lower Feeder. The common driver for the projects in this appropriation is infrastructure reliability.

Purpose

To maintain the reliability of the Second Lower Feeder through specific PCCP repair and rehabilitation projects.

Accomplishments Through FY 2015/16

This is a new appropriation for all Second Lower Feeder PCCP Rehabilitation. Funds and expendituires previously appropriated and spent under Appn. 15471 are to be transferred to this Appropriation

Project	Total Project Estimate	Estimated Completion	Planned Activity
Second Lower Feeder PCCP Rehabilitation	10,791,527	2017	Continue final design
Second Lower Feeder PCCP Rehabilitation - Package 1	52,635,819	2020	Begin construction
Second Lower Feeder PCCP Rehabilitation - Package 2	34,175,630	2021	Continue final design
Second Lower Feeder PCCP Rehabilitation - Package 3	63,045,253	2022	Continue final design
Second Lower Feeder PCCP Rehabilitation - Pipe Procurement	3,966,135	2018	Begin procurement
Second Lower Feeder PCCP Rehabilitation - Right of Way Acquisition	5,383,996	2022	Continue acquisition planning
Second Lower Feeder PCCP Rehabilitation - Valve Procurement	11,804,559	2023	Begin procurement

^{*}All previously appropriated funds and expenditures for the Second Lower Feeder PCCP Rehabilitation under Appropriation 15471 are to be transferred to this Appropriation.

Sepulveda Feeder PCCP Rehab

15496

Total Appropriation \$754,200,000 Total Projected Through June 30, 2016: \$15,900,000

Appropriated Amount: \$0 Estimated Percent Complete: 3%

Biennial Estimate: \$6,000,000 Estimated Completion Date: 2031

Scope

This appropriation was established to plan and implement projects to rehabilitate PCCP portions of the Sepulveda Feeder. The common driver for the projects in this appropriation is infrastructure reliability.

Purpose

To maintain the reliability of the Sepulveda Feeder through specific PCCP repair and rehabilitation projects.

Accomplishments Through FY 2015/16

Through FY 2015/16, one project has been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Sepulveda Feeder PCCP 2016 Urgent Repairs - Completed construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Sepulveda Pipeline PCCP Rehabilitation	738,348,989	2031	Begin final design

Skinner Water Treatment Plant - Oxidation Retrofit

15388

Total Appropriation \$245,500,000 Total Projected Through June 30, 2016: \$244,300,000

Estimate: \$243,300,000 Total Projected Pillough Suite 30, 2010. \$244,300,

Appropriated Amount: \$245,492,000 Estimated Percent Complete: 99%

Biennial Estimate: \$856,500 Estimated Completion Date: 2018

Scope

This appropriation was established to design and construct all systems and facilities that are required to provide ozone disinfection capability and to integrate those systems into the existing plant operations.

Purpose

To reduce the level of disinfection by-products in the treated water supplied by the Skinner plant in order to meet state and federal standards and provide consistent and equitable high quality treated water to all of Metropolitan's member agencies.

Accomplishments Through FY 2015/16

Through FY 2015/16, seven projects have been completed.

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Skinner Contactor Roof Elastomeric Coating	856,500	2018	Begin construction

Termination of Center for Water Education Ground Lease 15449

Total Appropriation \$4,673,000 Total Projected Through June 30, 2016: \$4,100,000

Estimate:

Appropriated Amount: \$4,673,000 Estimated Percent Complete: 88%

Biennial Estimate: \$21,280 Estimated Completion Date: 2017

Scope

This appropriation was established to plan and implement multiple projects at the Diamond Valley Lake (DVL) Visitor's Center, formerly known as "The Center for Water Education."

Purpose

To maintain the DVL campus by developing and constructing projects that enhance revenue for Metropolitan's Real Property Development and Management Group, as well as provide assistance and support for WSO staff stationed at DVL.

Accomplishments Through FY 2015/16

DVL Visitor's Center Improvements - Completed design

Project	Total Project Estimate	Estimated Completion	Planned Activity
DVL Visitor's Center Improvements	391,000	2017	Complete construction

Union Station Headquarters Improvements

15473

Total Appropriation \$42,200,000 Total Projected Through June 30, 2016: \$4,600,000

Appropriated Amount: \$5,320,000 Estimated Percent Complete: 11%

Biennial Estimate: \$15,100,000 Estimated Completion Date: 2020

Scope

This appropriation was established to implement seismic modifications to Metropolitan's Headquarters Building at Union Station in Los Angeles. Planned preliminary design activities include the following: review of code and permit requirements; preparation of a preliminary design scaled testing of structural components; detailed structural analyses and evaluation; preparation of a preliminary design report and environmental documentation; and development of a preliminary construction cost estimate. Repair plans will be developed for areas which would likely be damaged in a major earthquake.

Purpose

To implement seismic modifications to Metropolitan's Headquarters Building which would likely be damaged in a major earthquake.

Accomplishments Through FY 2015/16

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Headquarters Building Seismic Assessment/Upgrade	41,887,088	2020	Begin construction

Verbena Property Acquisition

15492

Total Appropriation \$264,000,000 Total Projected Through June 30, 2016: \$256,600,000

Appropriated Amount: \$264,000,000 Estimated Percent Complete: 97%

Biennial Estimate: \$2,600,000 Estimated Completion Date: 2021

Scope

This appropriation was established to acquire various properties in Riverside and Imperial Counties.

Purpose

To enhance supply reliability.

Accomplishments Through FY 2015/16

Verbena Land Acquisition 1- Completed property acquisition

Project	Total Project Estimate	Estimated Completion	Planned Activity	
Verbena Land Acquisition 1	158,915,538	2021	Survey and Property Recordation	

Water Delivery System Improvements

15488

Total Appropriation \$40,500,000 Total Projected Through June 30, 2016: \$25,000,000

Estimate:

Appropriated Amount: \$28,200,000 Estimated Percent Complete: 62%

Biennial Estimate: \$5,351,000 Estimated Completion Date: 2019

Scope

This appropriation was established to provide flexibility to distribute Colorado River water portions of the service area that currently rely exclusively on deliveries from the State Water Project.

Purpose

To improve the reliability and flexibility of delivering Colorado River water during drought or other State Water Project delivery constraints.

Accomplishments Through FY 2015/16

Through FY 2015/16, one project has been completed.

Major project milestone in FY 2014/15 and FY 2015/16:

Inland Feeder – Lakeview Pipeline Intertie – Completed construction

Project	Total Project Estimate			Planned Activity	
Greg Avenue Pump Station Improvements	17,818,5	28	2019	Complete design	

Water Operations Control

15467

Total Appropriation \$119,300,000 Total Projected Through June 30, 2016: \$10,000,000

Appropriated Amount: \$15,010,000 Estimated Percent Complete: 8%

Biennial Estimate: \$23,900,000 Estimated Completion Date: 2026

Scope

This appropriation is established to further coordinate the capabilities of Metropolitan's control system, Supervisory Control and Data Acquisition (SCADA) with operational and business needs. The appropriation will focus on maintaining system reliability, system integration, and improving operational and business capabilities and efficiencies.

Purpose

Maintain the reliability and integrity of Metropolitan's Control system.

Accomplishments Through FY 2015/16

Through FY 2015/15, one project has been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Wadsworth Pumping Plant Control & Protection Upgrades – Began initial phase of construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
AMR System RTUs and Radio Modem Upgrade Project	5,181,495	2019	Begin deployment
RTU CPU and OS Replacement	4,361,999	2019	Begin deployment
SCADA System & Communication Network Upgrade Planning (Phase 1)	3,189,500	2019	Define scope
Wadsworth Control Upgrade Phase IV	14,909,997	2019	Begin construction
Wadsworth Pumping Plant Control & Protection Upgrades	10,789,800	2017	Complete initial phase of construction

Weymouth Water Treatment Plant - Improvements

15369

Total Appropriation \$240,700,000 Total Projected Through June 30, 2016: \$175,200,000

Appropriated Amount: \$178,039,800 Estimated Percent Complete: 73%

Biennial Estimate: \$4,900,000 Estimated Completion Date: 2025

Scope

This appropriation was established to plan and implement multiple projects at the Weymouth Water Treatment Plant. The common driver for many of the projects in this appropriation is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Weymouth plant.

Accomplishments Through FY 2015/16

Through FY 2015/16, fifteen projects have been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Weymouth Basin Drop Gate Replacement - Completed construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Weymouth Administration and Control Building Seismic Upgrades	10,728,000	2021	Begin final design
Weymouth Filter Valve Replacement	22,574,773	2023	Begin construction

Weymouth Water Treatment Plant - Improvements for FY2006/07 through FY2011/12

15440

Total Appropriation

\$57,000,000 Total Projected Through June 30, 2016: Estimate:

\$15,300,000

Appropriated Amount:

\$17,438,000 Estimated Percent Complete:

27%

Biennial Estimate:

\$660,900 Estimated Completion Date:

2022

Scope

This appropriation was established to implement multiple rehabilitation projects at the Weymouth plant. The common driver for many of these projects is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Weymouth plant.

Accomplishments Through FY 2015/16

Through FY 2015/16, three projects have been completed.

Major project milestone in FY 2014/15 and FY 2015/16:

Weymouth Finished Water Reservoir Gate Replacement - Completed construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Weymouth Basin 5-8 Refurbishment	39,870,689	2022	Begin final design

Weymouth Water Treatment Plant - Improvements for FY2012/13 through FY2017/18

15477

Total Appropriation \$81,000,000 Total Projected Through June 30, 2016: \$30,800,000

Appropriated Amount: \$50,687,000 Estimated Percent Complete: 38%

Biennial Estimate: \$20,100,00 Estimated Completion Date: 2023

Scope

This appropriation was established to plan and implement multiple projects at the Weymouth Water Treatment Plant. The common driver for many of the projects in the appropriation is infrastructure reliability.

Purpose

To maintain reliability and ensure regulatory compliance of the Weymouth plant.

Accomplishments Through FY 2015/16

Through FY 2015/16, one project has been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Weymouth Domestic and Fire Water System Improvements - Completed final design

Weymouth Filter Rehabilitation - Began construction

Project	Total Project Estimate	Estimated Completion	Planned Activity
Weymouth Basin Gate Improvements	8,657,099	2022	Begin final design
Weymouth Chlorine System Upgrade	3,592,009	2021	Complete final design
Weymouth East Washwater Tank Pumps Replacement	1,509,048	2017	Complete construction
Weymouth Filter Rehabilitation	41,062,048	2018	Complete construction
Weymouth Oxidation Demonstration Rehabilitation Project	3,461,203	2020	Begin final design
Weymouth Solids Handling Facility Rehabilitation	929,000	2020	Begin preliminary design

Weymouth Water Treatment Plant - Oxidation Retrofit

15392

Total Appropriation \$270,000,000 Total Projected Through June 30, 2016: \$226,700,000

Appropriated Amount: \$246,892,000 Estimated Percent Complete: 84%

Biennial Estimate: \$28,423,000 Estimated Completion Date: 2019

Scope

This appropriation was established to design and construct all systems and facilities that are required to provide ozone disinfection capability and to integrate those systems and facilities into the existing plant operations.

Purpose

To reduce the level of disinfection by-products in the treated water supplied by the Weymouth plant in order to meet state and federal standards and provide consistent and equitable high quality treated water to all of Metropolitan's member agencies.

Accomplishments Through FY 2015/16

Through FY 2015/16, one project has been completed.

Major project milestones in FY 2014/15 and FY 2015/16:

Weymouth Hypochlorite Feed Facilities - Began construction

Weymouth Ozonation Facilities (Construction, start-up & commissioning) – Completed major tie-ins of newly constructed facilities

Project	Total Project Estimate	Estimated Completion	Planned Activity
Weymouth Hypochlorite Feed Facilities	14,413,707	2018	Complete construction
Weymouth ORP - Ozone Equipment Procurement	2,573,580	2018	Complete construction
Weymouth Ozonation Facilities (Start-up & commissioning)	169,249,471	2018	Complete testing and start-up

Whitewater Siphon Protection

15341

Total Appropriation \$15,300,000 Total Projected Through June 30, 2016: \$2,900,000

Appropriated Amount: \$2,835,000 Estimated Percent Complete: 19%

Biennial Estimate: \$5,000,000 Estimated Completion Date: 2019

Scope

This appropriation was established to design and construct a protective barrier for the Whitewater siphons to prevent further erosion of streambed from undermining the siphons, and remediate the Whitewater Mining Pit in accordance with State regulations and prevent head-cutting of the mining pit from undermining the siphons in the event of a major flood.

Purpose

To prevent damage to the Whitewater Siphon due to storm flows on the Whitewater River and to ensure deliveries of CRA water.

Accomplishments Through FY 2015/16

No major milestones were achieved.

Project	Total Project Estimate	Estimated Completion	Planned Activity
Whitewater Siphon Protection Improvements	12,895,750	2019	Begin construction

SERVICE AREA ECONOMY

Metropolitan 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.

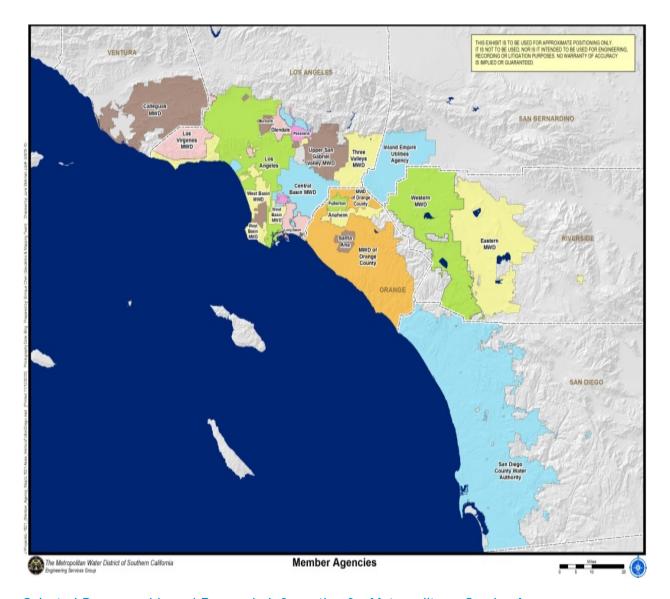
Metropolitan estimates that approximately 18.5 million people lived in Metropolitan's service area in 2014, based on official estimates from the California Department of Finance and on population distribution estimates from the Southern California Association of Governments (SCAG) and the San Diego Association 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 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.

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.

Service Area Map

The map below shows the area served by Metropolitan. It includes parts of six of the ten counties that comprise Southern California. The area served by Metropolitan represents the most densely populated and heavily industrialized portions of Southern California.

The economy of the area served by Metropolitan is generally described in terms of data for the six-county area (Six County Area) consisting of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Although these counties comprise Metropolitan's service area, Metropolitan's territory does not encompass all of the area within each of the six counties. In 2014, the economy of the Six County Area was larger than all but fifteen nations of the world. The Six County Area economy ranked between Mexico (\$1.28 trillion) and Indonesia (\$888 billion), with an estimated gross domestic product (GDP) of just over \$1.25 trillion. The Six County Area's gross domestic product in 2014 was larger than all states except California, Texas, and New York.



Selected Demographic and Economic Information for Metropolitan's Service Area

The map above shows the area served by Metropolitan. It includes parts of six of the ten counties that comprise Southern California. The area served by Metropolitan represents the most densely populated and heavily industrialized portions of Southern California.

The economy of the area served by Metropolitan is generally described in terms of data for the six-county area (Six County Area) consisting of Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Although these counties comprise Metropolitan's service area, Metropolitan's territory does not encompass all of the area within each of the six counties. In 2014, the economy of the Six County Area was larger than all but fifteen nations of the world. The Six County Area economy ranked between Mexico (\$1.28 trillion) and Indonesia (\$888 billion), with an estimated gross domestic product (GDP) of just over \$1.25 trillion. The Six County Area's gross domestic product in 2014 was larger than all states except California, Texas, and New York.

Table 14. Ranking of Areas by Gross Domestic Product*

Country	(Dollars in Billions) 2014
United States	17,348
China	10,360
Japan	4,601
Germany	3,853
United Kingdom	2,942
France	2,829
Brazil	2,346
California	2,312
Italy	2,144
India	2,067
Russian Federation	1,861
Canada	1,787
Texas	1,648
Australia	1,454
South Korea	1,410
New York	1,404
Spain	1,404
Mexico	1,283
Six County Area	1,254
Indonesia	888

^{*} Source: Countries – World Bank; U.S – Bureau of Economic Analysis; California and Six County Area – U.S. Department of Commerce

Summary of Recent Trends and Outlook for the Six County Area Economy

The national economy has expanded since 2009 although at growth rates below the historical average for economic recoveries. Private sector nonfarm wage and salary job levels in August 2015 were nearly 4.3 million above the pre-recession peak level, including a gain of over 850,000 manufacturing jobs and 734,000 construction jobs since the recession low. The unemployment rate in the nation has declined from near 9.8% in November 2010 to 5.1% in August 2015.

Housing starts and new permits have rebounded as the number of foreclosures has declined and housing prices have risen in most parts of the country, although the pace of housing recovery has slowed in recent months. Consumer price increases remain well below 2% annually aided by the decline in oil prices. The Six County Area has regained all the jobs lost during the recession and more. Revised job estimates released in March 2015 show that job gains in 2013 and 2014 were much larger than previously reported and higher than the national growth rate. Year-over-year job gains continued in 2015 and between August 2014 and

August 2015 job growth for the entire Six County Area was 214,200 jobs or a gain of 2.5% compared to a 2.1% increase in jobs for the nation.

Unemployment rates in the Six County Area have declined sharply between 2010 and August 2015. In August 2015 unemployment rates ranged from a low of 5.1% in Orange County to a high of 7.0% in Riverside and Los Angeles counties. Income, taxable sales, assessed valuation and housing prices rose in 2013 and 2014. Residential building permits rebounded in 2013 and 2014 and were up 22% for the first seven months of 2015. Nonresidential permit levels reached a record \$12.3 billion in 2014 were down 5% in the first seven months of 2015.

The Six County Area is experiencing growth in both domestic and foreign visitors. Hotel rates and occupancy are increasing in the Six County Area and the same is true for employment in the hotel and amusement park sectors. In 2014 Los Angeles County set tourism records in visitors (44.2 million), hotel occupancy rates (78.9%) and average daily rate (\$147.30). Foreign travel to the region is outpacing domestic travel with large gains in visitors from China of \$+20.4% in 2014 to 686,000 visitors. Air passenger travel in the Six County Area reached a record level in 2014 was up again in 2015.

Population growth in the Six County Area since 2010 has exceeded the national average according to both the California Department of Finance ("DOF") estimates and those published by the Census Bureau. However, population growth in California and the Six County Area has been slowing since 2000 compared with previous decades. The Six County Area added an average of 230,000 residents per year between 2000 and 2005 but only an additional 154,000 residents per year in the next nine years although gains in the past three years have averaged 190,000 residents per year.

Long-term job growth is driven by the Six County Area's economic base—those sectors that sell most of their goods and services in national and world markets outside of the Six County Area. Recent projections by the Center for Continuing Study of the California Economy (CCSCE), the Southern California Association of Governments (SCAG) and the San Diego Association of Governments (SANDAG) report that the Six County Area will see job growth that slightly exceeds the national average during the next 10 to 30 years, led by gains in Professional and Business Services, Wholesale Trade, Tourism and Entertainment and Health Care.

The recent growth in taxable sales, assessed valuation and hotel occupancy in the Six County Area has led to higher revenue growth for cities and counties and allowed them to rehire some of the local government and school employees who were laid off during the recession.

Recent Six County Area Job Growth Trends

The Six County Area has regained all the jobs lost during the recession and more. Revised job estimates released in March 2015 show that job gains in 2013 and 2014 were much larger than previously reported. Year-over-year job gains (see the table below) are continuing into 2015 and between August 2014 and August 2015 ranged from a high of 3.5% in Riverside-San Bernardino metro area to a low of 0.9% in Ventura County. Job growth for the entire Six County Area was 214,200 jobs or a gain of 2.5% compared to a 2.1% increase in jobs for the nation.

Job growth was aided by gains in foreign trade, tourism and professional services as well as a rebound in construction and related sectors and continuing growth in health care and food services.

Table 15. Recent Employment Trends (Non-Farm Wage and Salary Jobs in Thousands)

County	2007	2010	2013	2014	Aug 2014	Aug 2015	Aug 14-15 % Change
Los Angeles	4,227.4	3,888.4	4,129.8	4,226.4	4,213.0	4,289.3	1.8%
Orange	1,521.0	1,366.0	1,459.4	1,495.9	1,492.4	1,540.9	3.2
Riverside-San Bernardino	1,286.0	1,144.2	1,231.9	1,285.1	1,280.0	1,324.5	3.5
San Diego	1,319.7	1,236.4	1,317.8	1,348.0	1,349.0	1,391.4	3.1
Ventura	297.8	274.6	287.9	293.0	291.9	294.4	0.9
Total Six County Area	8,651.9	7,909.6	8,426.8	8,648.4	8,626.3	8,840.5	2.5

Source: California Employment Development Department

The large job losses in 2008 and 2009 resulted in a sharp rise in unemployment rates throughout the Six County Area between 2006 and 2010. Unemployment rates in the Six County Area have declined sharply between 2010 and August 2015. In August 2015 unemployment rates ranged from a low of 4.5% in Orange County to a high of 7.0% in Riverside and Los Angeles counties. Unemployment rates for the counties are not seasonally adjusted and peak in the summer months. All counties in the Six County Area experienced a substantial decline in unemployment rates between August 2014 and August 2015.

The Six County Area moved from substantial job losses on a monthly basis to a period of stability in job levels and finally accelerating job growth over the past 4 years. (See the figure below.) The Six County Area is outpacing the nation in job growth since the beginning of 2013 although unemployment rates have not fully recovered to the pre-recession levels. By August 2015 job levels were 225,600 above the pre-recession peak level in July 2007.

Table 16. Unemployment Rates

	2000	2006	2010	2013	2014	Aug 14	Aug 15
Los Angeles County	5.4%	4.8%	12.5%	9.8%	8.3%	8.6%	7.0%
Orange County	3.5	3.4	9.7	6.5	5.5	5.8	4.5
Riverside County	5.4	5.0	14.5	10.3	8.2	8.8	7.0
San Bernardino County	4.8	4.8	14.2	10.3	8.0	8.3	6.5
San Diego County	3.9	4.0	10.7	7.8	6.4	6.6	5.1
Ventura County	4.5	4.3	10.8	7.9	6.7	7.0	5.8
United States	4.0	4.6	9.6	7.4	6.2	6.1	5.1
State of California	4.9	4.9	12.2	8.9	7.5	7.4	6.1

Source: U.S. Bureau of Labor Statistics and EDD; U.S. and California estimates for March are seasonally adjusted.

The Six County Area moved from substantial job losses on a monthly basis to a period of stability in job levels and finally accelerating job growth over the past 4 years (Table 16). The Six County Area is outpacing the

nation in job growth since the beginning of 2013 although unemployment rates have not fully recovered to the pre-recession levels. By August 2015 job levels were 225,600 above the pre-recession peak level in July 2007.

Construction Activity

Residential building permit levels in the Six County Area declined sharply after 2004. Between 2004 and 2009, permit levels fell by 84 percent from 108,322 to 17,932 units. Permit levels have rebounded since 2009 reaching 46,906 in 2014. Permit levels increased by 22% for the first seven months of 2015 with most of the growth in multi-family unit permits. Since 2011 more than half of all new permits have been for multi-family residential buildings with more than 2/3 in 2014. Projected long-term job and population growth will support a much higher level of residential construction than is currently occurring.

Table 17. Residential Building Permits

	2004	2009	2013	2014	Jan-Jul 2014	Jan-Jul 2015	Jan-Jul % Chg 2014-15
Los Angeles County	26,395	5,653	16,895	18,728	11,520	13,783	20%
Orange County	9,322	2,200	10,453	10,568	6,034	7,447	23%
Riverside County	34,226	4,190	6,220	6,843	3,876	3,831	-1%
San Bernardino County	18,470	2,495	3,313	3,230	1,802	2,539	41%
San Diego County	17,306	2,990	8,382	6,583	4,084	6,058	48%
Ventura County	2,603	404	1,048	954	824	783	-5%
Total Six County Area	108,322	17,932	46,311	46,906	28,140	34,441	22%

Source: Construction Industry Research Board and California Homebuilding Foundation

Housing Trends in the Six County Area Economy

The housing market recovery that began in 2012 has continued and strengthened in 2013, 2014, and the first seven months of 2015 in the Six County Area. Housing prices increased, the number of new residential building permits rose and the number of new foreclosure filings declined. Mortgage rates remain near historic lows and the number of homes in the unsold inventory is low by historic standards according to the California Association of Realtors ("CAR"). These signs combined with expected job growth point to a continued strengthening in the housing market in 2015 and beyond.

Median resale housing prices in Six County Area markets were near 2003 levels at the lowest recent levels in March 2009. Median prices fluctuated in a narrow range until the summer of 2012 and then began a rebound that has continued into 2015. In July 2015 median prices throughout the Six County Area were at the top of the recent range with increases of between 49% and 78% since March 2012. CAR reported that the share of distressed properties declined from 37% of total sales in September 2012 to 7% statewide in July 2015. The Case Shiller home price index, which eliminates the effect of changes in the mix of housing, increased for the Los Angeles and San Diego regional markets over the three years ending in June 2015 gaining 42% in the Los Angeles market area and 38% in the San Diego market area during this period.

Nonresidential Construction

Nonresidential construction permit levels reached a record \$12.3 billion in 2014. For the first seven months of 2015 permit levels are down 5% from the 2014 record year. Nonresidential construction throughout the Six County Area peaked at \$11.3 billion in 2007. Between 2007 and 2009, nonresidential construction declined by more than 50% to a 2009 level of \$5.1 billion. The Six County Area is experiencing a rebound in nonresidential permit levels since 2009. The increase in residential and nonresidential building is supporting job growth in construction and related industries.

Table 18. Total Nonresidential Construction Permit Valuation (Dollars in Billions)

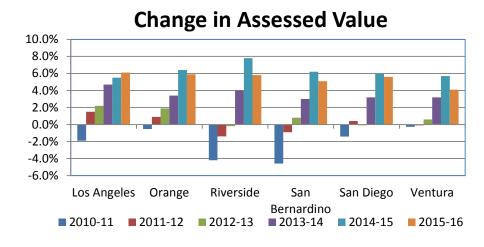
	2007	2009	2013	2014	Jan-Jul 2014	Jan-Jul 2015	Jan-Jul % Chg 2014-15
Los Angeles County	\$4.7	\$2.7	\$4.3	\$6.6	\$3.8	\$3.4	-11%
Orange County	2.0	1.0	1.6	2.0	1.2	1.1	-8%
Riverside County	1.5	0.4	8.0	0.8	0.5	0.5	0
San Bernardino County	1.4	0.3	0.7	0.9	0.4	0.6	50%
San Diego County	1.4	0.6	1.4	1.9	1.2	1.1	-8%
Ventura County	0.3	0.2	0.1	0.1	0.1	0.1	11%
Total Six County Area	\$11.3	\$5.1	\$8.9	\$12.3	\$7.2	\$6.8	-5%

Source: Construction Industry Research Board and California Homebuilding Foundation Assessed Valuation

Assessed Valuation

Assessed valuation in the Six County Area has rebounded and outpaced inflation in recent years after a long downturn during the last recession that was another source of fiscal pressure on local communities throughout the Six County Area. Assessed values increased again for the 2015-16 fiscal year with gains ranging from 4.1% in Ventura County to 6.1% in Los Angeles County. For three years in a row assessed valuation growth has outpaced inflation in each county in the Six County Area.

Figure 19. Changed in Assessed Valuations

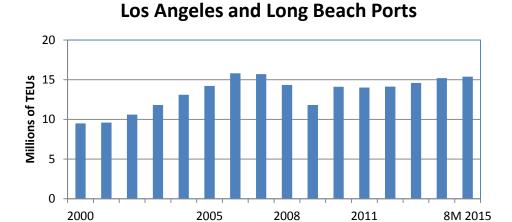


Source: County Assessor's Offices

International Trade

The recession led to a decline in the dollar volume and physical volume of international trade in the Six County Area in 2008 and 2009. Container volumes have recovered since 2009 and neared pre-recession levels in 2014. Container volumes in 2015 have been volatile as a result of strikes with a strong recovery in recent months after sharp declines in January and February and are up 1% through August.

Figure 20. Container Shipments (Los Angeles and Long Beach Ports)



Container Shipments

Source: Ports of Los Angeles and Long Beach

Over the longer term, international trade has been a leading growth sector in the Six County Area. Container volume rose 60% between 2000 and 2014 despite the large drop in 2008 and 2009. Trade volume increased by 0.5% in 2014 to \$416.6 billion leading all U.S. ports. This growth supports jobs and economic activity in the transportation, wholesale trade and warehousing industries as the Six County Area is a gateway for U.S. trade with Pacific Rim countries. For example, the Riverside-San Bernardino metro area, where many imports are stored and shipped from, saw an increase in warehousing jobs from 18,300 to 36,500 between April 2010 and July 2015 along with 19,900 jobs added in trucking and wholesale trade with all three sectors exceeding pre-recession job levels.

The Los Angeles and Long Beach ports are the nation's leading port complex in terms of trade volume. The area's ports handle 50% of the nation's trade with China. China is by far the largest trading partner for these ports with \$176.1 billion in two-way trade in 2014, up 1.8% from 2013, with the dominant portion related to imports from China. The next largest trading partner is Japan (\$40.4 billion) followed by South Korea, Taiwan and Vietnam. Mexico is by far the largest trading partner in the San Diego Customs District.

Long-term growth in the United States and in our trading partners will boost international trade levels of activity in the coming years as will new trade agreements. The Six County Area's largest trading partners include some of the world's fastest growing economies such as China, South Korea and Mexico. The Los Angeles County Economic Development Corporation (LAEDC) forecasts that trade volume will be flat in 2015 and increase by 5.5% in 2016 in a report issued before the recent turmoil in the Chinese economy and stock market.

The LAEDC International Trade report in May 2015 cited progress on a number of infrastructure projects to expand port capacity with more than \$6 billion being invested in current upgrades at ports, airports and

supporting land transportation infrastructure. The report also cited long-term challenges including competition from the Panama Canal expansion and from other east and west-coast ports.

Income and Wages

Counties in the Six County Area have income and wage levels that range from below the national average to above the national average. Orange and Ventura counties have the highest household income levels within the Six County Area. Los Angeles and Orange counties have the highest wage levels, well above the national average. San Diego County income and wage levels are also above the national average. Riverside and San Bernardino counties have per capita income and wage levels that are below the national average. Median household income is above the national average in each of the counties in the Six County Area except San Bernardino County.

Per capita income and median household income measures are affected by demographic trends. Per capita income measures in the region are pushed downward by the above average percent of children in the Six County Area population compared to the national average while median household income measures are pushed upward by the above average number of wage earners per household in the Six County Area. Income and wage trends in the Six County Area have been comparable to national trends since 2000.

Per capita income is based on total personal income divided by population while median household income is based on money income, which is lower than total personal income.

The table below shows median household income and wage levels for each of the counties in the Six County Area, as well as for California and the United States, in 2014. The latest per capita income data is for 2013.

Table 19. Income and Wages

	Per Capita Income (2013)	Median Household Income (2014)	Average Wage (2014)
Los Angeles County	\$46,530	\$55,746	\$56,657
Orange County	54,519	76,306	56,771
Riverside County	33,278	57,006	40,363
San Bernardino County	52,747	52,041	42,043
San Diego County	51,384	66,192	56,561
Ventura County	50,507	75,449	51,886
California	48,434	61,933	59,042
United States	44,765	53,657	51,364

Source: Per Capita Income–U.S. Department of Commerce and CCSCE; Median Household Income–U.S. Census Bureau (American Community Survey); Average Wage–U.S. Bureau of Labor Statistics

Population

Population growth in California and the Six County Area has been slowing since 2000 compared with previous decades. Population growth averaged 174,100 per year between 2000 and 2010 compared to 219,300 between 1990 and 2000. The Six County Area added nearly 1.2 million residents between 2000 and 2005 but only an additional 588,000 residents in the next five years. Population growth slowed after 2005 as

high housing prices and large job losses contributed to larger levels of out-migration to other areas of California and other states.

Population growth continued at a historically slow pace between 2010 and 2014 according to the DOF estimates, averaging 161,000 per year. The Six County Area had 21.6 million residents in 2014, approximately 56% of the State's population.

Table 20. Six County Area Population (in Thousands)

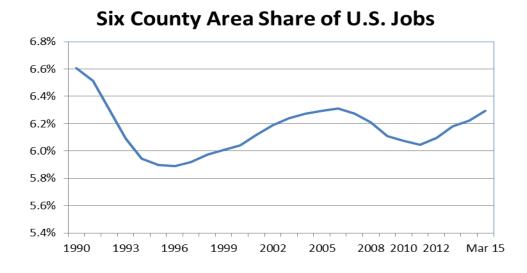
	1990	2000	2005	2010	2012	2013	2014
Los Angeles County	8,860	9,544	9,810	9,825	9,945	10,013	10,069
Orange County	2,412	2,854	2,957	3,017	3,074	3,100	3,133
Riverside County	1,188	1,557	1,935	2,192	2,249	2,265	2,295
San Bernardino County	1,432	1,719	1,943	2,039	2,064	2,074	2,092
San Diego County	2,505	2,828	2,970	3,103	3,153	3,177	3,212
Ventura County	669	757	797	825	833	839	844
Total Six County Area	17,066	19,259	20,412	21,001	21,318	21,468	21,645

Source: California Department of Finance as of July 1

Economic Structure of the Six County Area and Long-Term Prospects

The Six County Area has now recovered all of the losses in the area's share of national jobs that occurred during the recession after 2007. In March 2015 the Six County Area accounted for 6.3% of the nation's nonfarm wage and salary jobs, the highest share since 1991. The pattern of larger percentage job losses compared to the nation during a recession mirrors the experience of the early 1990s when aerospace jobs declined sharply and the Six County Area share of U.S. non-farm wage and salary jobs fell from 6.6% to a low of 5.9%. As in the economic growth period after 1994, the Six County Area's share of national jobs has grown steadily during the current expansion period.

Figure 21. Six County Share of US Jobs



Sources: EDD, Bureau of Labor Statistics, U.S. Dept. of Labor, CCSCE

In 2014 Education and Health Services was the largest major industry sector in the Six County Area measured by jobs, with just fewer than 1.4 million jobs or almost 16% of the Six County Area total (see the table on the following page).

The next largest sectors in 2014 were Professional and Business Services and Government followed by Leisure and Hospitality, Retail Trade and Manufacturing. Two sectors accounted for most of the job growth since 2000: Educational and Health Services and Leisure and Hospitality. Six County Area job levels in 2014 were nearly identical to 2007 levels despite large losses in Construction and Manufacturing. Between 2010 and 2014 the Six County Area added more than 830,000 jobs.

Since 2010 most sectors have seen job growth and Construction jobs have rebounded but are still below prerecession levels. There was strong growth in Professional and Business Services reversing all of the recession job losses. Wholesale Trade activity also rebounded along with port traffic and the growing economy.

Table 21. Six County Area Employment by Major Sector (Jobs in Thousands)

	2000	2007	2010	2014	Change 2000- 2014	Change 2007- 2014
Farm	67.7	63.8	59.8	58.0	-9.7	-5.8
Natural Resources and Mining	6.3	7.8	7.3	8.4	2.1	0.6
Construction	373.8	479.0	298.9	356.4	-17.4	-122.6
Manufacturing	1,113.3	888.6	733.6	740.8	-372.5	-147.8
Wholesale Trade	385.2	429.2	382.4	421.1	35.9	-8.1
Retail Trade	834.5	948.5	849.5	915.1	80.6	-33.4
Transportation, Warehousing and Utilities	286.8	298.9	275.7	309.6	22.8	10.7
Information	343.3	293.5	262.5	263.8	-79.5	-29.7
Financial Activities	448.3	524.3	441.6	455.7	7.4	-68.6
Professional and Business Services	1,171.9	1,285.5	1,138.2	1,288.5	116.6	3.0
Educational and Health Services	828.1	1,060.2	1,151.2	1,359.8	531.7	299.6
Leisure and Hospitality	740.4	897.2	861.0	1,014.2	273.8	117.0
Other Services	271.0	293.9	272.4	304.8	33.8	10.9
Government	1,170.9	1,245.8	1,240.9	1,213.1	42.2	-32.7
Total Wage and Salary Jobs	8,041.5	8,716.2	7,975.0	8,709.3	667.8	-6.9

Source: California Employment Development Department (EDD)

Long-term job growth is driven by the Six County Area's economic base—those sectors that sell most of their goods and services in national and world markets outside of the Six County Area. Recent projections by CCSCE, SCAG and SANDAG report that the Six County Area will see job growth that slightly exceeds the national average during the next 10 to 30 years, led by gains in Professional and Business Services, Wholesale Trade, Information and the tourism component of Leisure and Hospitality.

The Six County Area economy has an economic base that is diversified and well positioned to participate in U.S. and world economic growth over the next ten years. Job levels are expected to grow in the high-wage and fast-growing professional, scientific, technical and information services sectors, which include architecture, design, computer, research and development, advertising, legal, accounting, and Internet-related and management services. Other fast-growing sectors over the next ten years include entertainment and tourism industries and health care.

The Six County Area has an above-average share of four additional fast-growing sectors—Wholesale Trade and Transportation, tied to the area's projected growth in foreign trade; Information, which includes motion pictures; and the tourism component of Leisure and Hospitality, tied to growth in disposable income in the U.S. and worldwide.

The diversity of the Six County Area economy has led to GDP growth since 2001 that matches the national average despite the fact that the area had below average growth during the recession. Average GDP growth in nominal dollars (see the table on the following page) was 3.8% per year compared to 3.8% for the nation and 4.0% for the state between 2001 and 2014.

FINANCIAL POWERS (MWD ACT)

THE METROPOLITAN WATER DISTRICT ACT

Sec. 18. [Fiscal Year]

The fiscal year of any metropolitan water district shall commence on the first day of July of each year and shall continue until the close of the 30th day of June of the year following.

Sec. 61. [Ordinances, Resolutions and Orders]

The board may make and pass ordinances, resolutions and orders necessary for the government and management of the affairs of the district, for the execution of the powers vested in the district and for carrying into effect the provisions of this act.

Amended by Stats. 1969, ch. 441

Sec. 123. [Borrowing, Limitation]

A district may borrow money and incur indebtedness and issue bonds or other evidence of such indebtedness, except that no district shall incur indebtedness which, in the aggregate, shall exceed 15 percent of the assessed valuation of all the taxable property included within the district, as shown by the assessment records of the county or counties.¹

CASE NOTE

A contract between the State and a metropolitan water district for a water supply from the State Water Resources Development System was a contract for the furnishing of continued water service in the future, payments by the district being contingent upon performance of contractual duties by the State and not incurred at the outset, so the district did not incur an indebtedness in excess of that permitted by former Section 5(7) of the Metropolitan Water District Act (now Sec. 123).

Metropolitan Water District v. Marquardt, 59 Cal.2d 159, 28 Cal. Rptr. 724 (1963)

Sec. 124. [Taxes, Levy and Limitation]

A district may 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, except that such taxes, exclusive of any tax levied to meet the bonded indebtedness of such district and the interest thereon, exclusive of any tax levied to meet any obligation to the United States of America or to any board, department or agency thereof, and exclusive of any tax levied to meet any obligation to the state pursuant to Section 11652 of the Water Code, shall not exceed five cents (\$0.05) on each such one hundred dollars (\$100) of assessed valuation. The term "tax

¹ The assessed valuation of all taxable property as of June 30, 2011 used in calculating the ad valorem tax limitation was more than \$2 trillion (\$2,050,497,523,732), fifteen percent of this amount is \$307.6 billion (\$307,574,628,560).

levied to meet the bonded indebtedness of such district and the interest thereon" as used in this section shall also include, but shall not be limited to, any tax levied pursuant to Section 287 to pay the principal of, or interest on, bond anticipation notes and any tax levied under the provisions of any resolution or ordinance providing for the issuance of bonds of the district to pay, as the same shall become due, the principal of any term bonds which under the provisions of such resolution or ordinance are to be paid and retired by call or purchase before maturity with moneys set aside for that purpose.

Amended by Stats. 1969, ch. 441

CASE NOTE

An article in a contract between the State and a metropolitan water district for a water supply from the State Water Resources Development System which article is based upon Water Code Section 11652, requiring the district to levy a tax to provide for all payments due under the contract, does not contravene former Section 5(8) of the Metropolitan Water District Act, imposing a limit on taxation, as Section 11652 is a special provision relating only to taxation to meet obligations from water contracts with state agencies, whereas said Section 5(8) is a general provision relating to taxation by a district for all purposes and the special provision controls the general provision.

Metropolitan Water District v. Marquardt, 59 Cal.2d 159, 28 Cal. Rptr. 724 (1963).

Sec. 124.5. [Ad valorem Tax Limitation]

Subject only to the exception in this section and notwithstanding any other provision of law, commencing with the 1990-91 fiscal year any ad valorem property tax levied by a district on taxable property in the district, other than special taxes levied and collected pursuant to annexation proceedings pursuant to Articles 1 (commencing with Section 350), 2 (commencing with Section 360), 3 (commencing with Section 370), and 6 (commencing with Section 405) of Chapter 1 of Part 7, shall not exceed the composite amount required to pay (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. The restrictions contained in this section do not apply if the board of directors of the district, following a hearing held to consider that issue, finds that a tax in excess of these restrictions is essential to the fiscal integrity of the district, and written notice of the hearing is filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate at least 10 days prior to that date of the hearing.

Added by Stats. 1984, ch. 271.

Sec. 130. [General Powers to Provide Water Services]

A district may do all of the following:

- (a) Acquire water and water rights within or without the state.
- (b) Develop, store, and transport water.
- (c) Provide, sell, and deliver water at wholesale for municipal and domestic uses and purposes.

- (d) Fix the rates for water, and the amount of any water standby or availability service charge or assessment. Any such water standby or availability service charge or assessment shall be deemed to be amounts paid by the member public agency to the district on tax assessments.
- (e) Acquire, construct, operate, and maintain any and all works, facilities, improvements, and property necessary or convenient to the exercise of the powers granted by this section.

Amended by Stats. 1984, ch. 271.

Sec. 133. [Fixing of Water Rates]

The board shall fix the rate or rates at which water shall be sold. Such rates, in the discretion of the board, may differ with reference to different sources from which water shall be obtained by the district. The board, under conditions and on terms found and determined by the board to be equitable, may fix rates for the sale and delivery to member public agencies of water obtained by the district from one source of supply in substitution for water obtained by the district from another and different source of supply, and may charge for such substitute water at the rate fixed for the water for which it is so substituted.

Sec. 134. [Adequacy of Water Rates; Uniformity of Rates]

The Board, so far as practicable, shall fix such rate or rates for water as will result in revenue which, together with revenue from any water stand-by or availability service charge or assessment, will pay the operating expenses of the district, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by the district, and provide for the payment of the interest and principal of the bonded debt subject to the applicable provisions of this act authorizing the issuance and retirement of the bonds. Those rates, subject to the provisions of this chapter, shall be uniform for like classes of service throughout the district.

Amended by Stats. 1984, ch. 271

Sec. 134.5. [Water Standby or Availability of Service Charge]

- (a) The board may, from time to time, impose a water standby or availability service charge within a district. The amount of revenue to be raised by the service charge shall be as determined by the board.
- (b) Allocation of the service charge among member public agencies shall be in accordance with a method established by ordinance or resolution of the board. Factors that may be considered include, but are not limited to, historical water deliveries by a district; projected water service demands by member public agencies of a district; contracted water service demands by member public agencies of a district; service connection capacity; acreage; property parcels; population, and assessed valuation, or a combination thereof.
- (c) The service charge may be collected from the member public agencies of a district. As an alternative, a district may impose a service charge as a standby charge against individual parcels within the district.

In implementing this alternative, a district may exercise the powers of a county water district under Section 31031 of the Water Code, except that, notwithstanding Section 31031 of the Water Code, a district may (1) raise the standby charge rate above ten dollars (\$10) per year by a majority vote of the board, and (2) after taking into account the factors specified in subdivision (b), fix different standby charge rates for parcels situated within different member public agencies.

- (d) Before imposing or changing any water standby or availability service charge pursuant to this section, a district shall give written notice to each member public agency not less than 45 days prior to final adoption of the imposition or change.
- (e) As an alternative to the two methods set forth in subdivision (c), a district, at the option of its board, may convert the charge to a benefit assessment to be levied pursuant to Sections 134.6 to 134.9, inclusive.

Added by Stats. 1984, ch. 271.

Sec. 239.2. [Limitation on Amount of Revenue Bonds]

No revenue bonds shall be issued under this chapter, except for refunding, unless the amount of equity of the district, 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 to be outstanding following the issuance of such bonds.

Added by Stats. 1972, ch. 169

FINANCIAL POLICIES (MWD ADMINISTRATIVE CODE)

FINANCIAL POLICIES

§ 4301. Cost of Service and Revenue Requirement.

(a) The District shall fix rates for water such that anticipated water sales revenues, together with anticipated revenues from any water standby or availability of service charge (such as the readiness-to-serve charge or capacity charge) or assessment, ad valorem tax revenues, and other revenues pay the expenses of the District, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by the District, and provide for the payment of the interest and principal of the District's outstanding bonded debt. Subject to the foregoing, such rates and charges shall reflect the costs of the District's major service functions, including water supply, conveyance, power, storage, distribution and treatment to the greatest degree practicable.

§ 4304. Apportionment of Revenues and Setting of Water Rates.

- (a) Not later than at its February meeting the General Manager shall present to the Finance and Insurance Committee of the Board:
 - (1) Determinations of the revenue requirements and cost of service analysis supporting the rates and charges required during the biennial period beginning the following July 1, as determined by the General Manager in accordance with current Board policies, and,
 - (2) Recommendations of rates including, but not limited to, the System Access Rate, Water Stewardship Rate, System Power Rate, Treatment Surcharge, and the Supply Rates for the various classes of water service to become effective each January 1 of the biennial period. These recommended rates shall be the General Manager's determination, made in accordance with current Board policies, of the rates necessary to produce substantially the revenues to be derived from water sales during the biennial period beginning the following July 1.
- (b) Not later than at its February meeting, the General Manager shall also present to the Finance and Insurance Committee recommendations regarding the continuation of a water standby charge or the imposition of an availability of service charge (such as the readiness-to-serve charge and capacity charge), which shall be the General Manager's determination, made in accordance with current Board policies, of the charge necessary to produce substantially the revenues to be derived from fixed revenue sources, if any, exclusive of taxes, during the biennial period beginning the following July 1 which the Finance and Insurance Committee has determined to be necessary.
- (c) Not later than its February meeting the Finance and Insurance Committee shall set a time or times for, and shall thereafter hold, one or more meetings of the Finance and Insurance Committee, to be held prior to its regular April meeting, at which interested parties may present their views regarding the proposed water rates and availability of service charges to said committee. The Finance and Insurance Committee shall direct the General Manager to cause the publication of a notice of such public hearing to be published in newspapers of general

circulation within the District's service area. Such notice shall be published not less than 10 days prior to the public hearing.

- (d) Not later than its regular April meeting the Finance and Insurance Committee shall make its determination regarding the revenue requirement to be paid from water rates and the water rates to become effective each January 1 of the biennial period and shall recommend said water rates to the Board no later than the Board's regular April meeting.
- (e) Not later than its April meeting, the Board shall establish water rates for deliveries beginning each January 1 of the biennial period.
- (f) Proposals for changes in water rates to become effective at times other than on January 1 shall require adequate notice to the public and a hearing before such proposals are acted upon by the Board, unless the Board finds that an immediate change in water rates is urgent.

Section 311.5 - M.I. 32924 – September 18, 1979, as clarified by M.I. 33059 – January 15, 1980; paragraph (g) [formerly Section 311.5.7] amended by M.I. 34867 - September 13, 1983. Section 311.5.7 repealed and Section 4304 adopted by M.I. 36464 - January 13, 1987, effective April 1, 1987; amended, new paragraphs (d), (f), (i) and (j) added and other paragraphs renumbered by M.I. 39976 - December 8, 1992; paragraphs (b) through (g), (i) and (j) amended by M.I. 41389 - May 9, 1995; paragraphs (a)-(d) amended by M.I. 42193 - December 10, 1996; paragraphs (b) through (g), and (i) and (j) amended by M.I. 43587 - June 8, 1999; paragraphs (a) through (k) amended by M. I. 44582 – August 20, 2001; paragraphs (a) – (g), (i), and (j) amended by M. I. 44812 -March 12, 2002; paragraph (a) amended, (a) (i) & (a) (ii) added, paragraphs (b) & (c) deleted, paragraphs (d) (e) (f) renumbered to (b) (c) (d), paragraph (g) renumbered to (e) and amended, paragraphs (h) (i) renumbered to (f) (g), and paragraphs (j) (k) renumbered to (h) (i), by order of M. I. 45537 - October 14, 2003; paragraphs (a)-(e) and (g)-(h) amended by M. I. 46064 – January 11, 2005; paragraphs (a) through (e), (g) and (h) amended (committee name change) by M. I. 46148 - March 8, 2005; paragraphs (a)-(i) amended by M.I. 46983 February 13, 2007; paragraph(b) and (c) amended, paragraph (d) deleted and renumbered by M.I. 47636 - September 9, 2008; paragraphs (c)-(e) amended by M.I. 48171 - February 9, 2010; paragraphs (a)-(g) amended by M.I. 48534 - January 11, 2011; amended § 4304 title, amended paragraphs (a)-(f), deleted former paragraphs (f) and (g), and renumbered former paragraph (h) by M.I. 49187 - September 11, 2012.

§ 5101. Investment of Surplus Funds.

- (a) Pursuant to Government Code Section 53607, this Board shall delegate to the Treasurer of the District annually the authority to invest or to reinvest funds of the District subject to the terms and conditions set forth in this Section 5101. The Treasurer shall report each month transactions made pursuant to this delegation.
 - (b) The terms and conditions of this delegation to the Treasurer are as follows:
 - (1) The Treasurer shall assume full responsibility for all transactions hereby delegated.
- (2) The Treasurer may invest such portion of any money in any sinking fund of the District, or any surplus moneys in the District's treasury not required for the immediate necessities of the District, as the Treasurer deems wise or expedient, in any of the securities authorized for investment by local agencies pursuant to Government Code Section 53601 or any successor statute; provided that such investments meet the requirements of the most current Statement of Investment Policy approved by the Board, pursuant to Section 5114 below.
- (3) The Treasurer may make any investment by direct purchase of any issue of the specified securities at their original sale or after they have been issued.

- (4) The available cash amount and maximum period for any such investment by the Treasurer shall be determined by the General Manager. The Treasurer shall not liquidate any such investment except:
- (i) To meet the District's cash requirements, which shall be determined by the General Manager; or
- (ii) To generate cash for reinvestment whenever the General Manager determines that such reinvestment is in the District's interest.

The Treasurer shall not exchange any such investment unless the General Manager determines that such exchange is in the District's interest.

Subject to the above provisions of this subsection 5101(b)(4), the Treasurer may enter into a reverse repurchase agreement, so long as the proceeds of the reverse repurchase agreement are invested solely to supplement the income normally received from the securities involved in the agreement.

- (5) The General Counsel shall review monthly and, if appropriate, approve as to eligibility the securities invested in by the Treasurer in the preceding month and report the determinations to the Board.
 - (6) Investment of Deferred Compensation Fund.
- (i) The Treasurer may invest funds held by the District pursuant to the District's deferred compensation plan in accordance with this Section 5101, and may liquidate such investments to comply with the provisions of the plan in accordance with the determinations of the General Manager.
- (ii) The Treasurer may also deposit for purposes of investment funds held by the District, pursuant to the District's deferred compensation plans, in the Metropolitan Water District Federal Credit Union to the limit insured by the National Credit Union Share Insurance Fund.
- (c) The Treasurer is authorized to enter into safekeeping agreements, in form approved by the General Counsel, and thereafter may deposit for safekeeping the bonds, notes, bills, debentures, obligations, certificates of indebtedness, warrants or other evidences of indebtedness in which the money of the District is invested pursuant to the terms and conditions of this Section 5101 with any state or national bank with which there is a safekeeping agreement and which has sufficient security, as required by law, to secure the amount of any collections. All net collections which may be made by the bank from time to time pursuant to said safekeeping agreement shall immediately be deposited in a deposit account held by a state or national bank within this state which is supported by sufficient security, as required by law, to secure the amount of such collections. The Treasurer shall take from such bank a receipt for securities so deposited either in definitive form in such bank or held in book-entry form on the books of the Federal Reserve Bank. All securities purchased shall be held in safekeeping under such agreements and shall only be released from safekeeping pursuant to such agreements.

Res. 7695 - December 7, 1976; Section 471.2 amended by M.I. 33083 - January 15, 1980; paragraph (b)(6) [formerly Section 471.2.2.6] amended by M.I. 33208 - April 18, 1980; paragraph (b)(2)(vi) [formerly Section 471.2.2.6] added by M.I. 34811 - August 17, 1983; paragraph (b)(2) [formerly Section 471.2.2.2] amended by M.I. 35122 - May 8, 1984; paragraph (b)(5) [formerly Section 471.2.2.5] amended by M.I. 35462 - January 8, 1985; paragraphs (b)(2)(vii) and (b)(2)(viii) [formerly Sections 471.2.2.2.7 and 471.2.2.2.8] and paragraph (b)(6)(ii) [formerly Section 471.2.2.6.2] added and paragraph (b)(6) renumbered by M.I. 35555 - March 12, 1985; paragraph (b)(2)(iv) [formerly Section 471.2.2.2.4] amended and paragraph (b)(2)(ix) [formerly Section 471.2.2.2.9] added by M.I. 36272 - September 9, 1986. Section 471.2 repealed and Section 5101 adopted by M.I. 36464 - January 13, 1987, effective April 1, 1987; paragraph (b)(2)(vii) amended by M.I. 36492 - February

10, 1987 and by M.I. 36761 - August 18, 1987; amended by M.I. 36811 - September 22, 1987; amended by M.I. 38234 - May 8, 1990; paragraph (B)(2) amended by M.I. 38577 - November 20, 1990; paragraph (B)(2) amended by M.I. 39171 - August 20, 1991; paragraph (B)(2)(vi) amended by M.I. 39497 and (B)(2)(x) added by M.I. 39496 - March 10, 1992; paragraph (B)(2) amended by M.I. 39785 - August 20, 1992; paragraph (b)(2) amended and subparagraphs of (b)(2)(i) through (x) repealed by M.I. 40682 - February 8, 1994; paragraph (a) amended by M.I. 42275 - February 11, 1997; paragraph (c) amended by M.I. 42559 - August 19, 1997.

§. 5107. Biennial Budget Process.

- (a) There shall be prepared each even-numbered year, under the direction of the General Manager, a proposed biennial budget covering District operations for the following two fiscal years. The proposed biennial budget shall be submitted to the Board no later than the date of the regular Board meeting in June immediately preceding the first fiscal year of the biennium to which the budget applies. The proposed biennial budget shall indicate by fund all anticipated expenses and required reserves and the source of revenues to be used to meet such expenses and provide such reserves. The proposed biennial budget will at a minimum include a five-year financial forecast. At least one Board Workshop on the proposed biennial budget will be conducted prior to submission of the proposed biennial budget for Board approval. The Finance and Insurance Committee shall review the proposed biennial budget in its entirety, together with the recommendations from the Board workshop, and report its recommendations to the Board.
- (b) After considering the proposed biennial budget and making any revisions thereto that it may deem advisable, the Board shall adopt the biennial budget before the beginning of the biennial period to which the budget applies. The amounts provided in the adopted budget for the biennial period for total expenses for operations and maintenance, including minimum and variable operations and maintenance charges under water or power contracts with the State, for capital charges under such contracts, and for debt service shall be deemed to be appropriated from the funds indicated in the budget.
- (c) The adoption of the budget shall have no effect upon appropriations for capital projects and continuing expenditures not susceptible to immediate direct allocation, as described in Section 5108 hereof, and shall not establish any limitations on expenditures for such purposes.
- (d) The total operations and maintenance budget shall be measured against the regional rate of inflation as measured by the five-year rolling average change in the Consumer Price Index (CPI) for the Los Angeles-Riverside-range County area, not seasonally adjusted, for all items as reported by the U. S. Bureau of Labor Statistics. The budget will include explanations of increases greater than the CPI due to unique conditions, growth or expansion of services.

Ords. 127 and 129; repealed by Ord. 146; Section 471.8 added, as amended, by M.I. 32690 - April 10, 1979; amended by M.I. 36110 - June 10, 1986. Section 471.8 repealed and Section 5107 adopted by M.I. 36464 - January 13, 1987, effective April 1, 1987; paragraph (a) amended by M.I. 36535 - March 10, 1987; paragraph (a) amended by M.I. 40231 - May 11, 1993; paragraph (a) amended by M.I. 41755 - February 13, 1996; paragraphs (a) and (b) amended by M.I. 42060 - September 10, 1996; paragraph (a) amended by M.I. 42193 - December 10, 1996; paragraph (a) amended by M. I. 44095 - July 11, 2000; paragraph (a) amended by M. I. 44582 - August 20, 2001; paragraph (a) amended and paragraph (d) added by M. I. 45904 - September 14, 2004; paragraph (a) amended by M. I. 46064 - January 11, 2005; paragraph (a) amended by M.I. 46148 - March 8, 2005; paragraph (a) amended by M.I. 46983 -

February 13, 2007; paragraph (a) amended by M.I. 48534-

January 11, 2011; section title and paragraphs (a)-(b) amended by M.I. 48800 – September 13, 2011; paragraphs (a), (b), and (d) amended by M.I. 49187 - September 11, 2012

The District operates as a single enterprise fund for financial statements and budgeting purposes. Through its administrative code the District identifies a number of accounts, which are referred to as funds, to separately track uses of monies for specific purposes.

§ 5109. Capital Funding from Current Revenues.

To preserve debt capacity for evolving or unexpected financial needs Metropolitan shall fund replacements and refurbishments, capital projects costing less than \$1 million, or capital projects with useful lives less than the typical bond terms, and reimbursable capital projects from annual revenues. The Board's objective shall be to fund annually on a pay-as-you-go basis these elements of the capital investment plan to maintain stable water rates and charges, strong financial ratios, debt capacity and appropriate reserve levels. The amount of annual expenses paid from current revenues shall be determined by the Board as part of the biennial budget process and shall include the costs of:

- (a) Capital facilities or projects totaling \$1,000,000 or less.
- (b) Capital assets with estimated payback periods or useful lives shorter than the calculated average life of alternative long-term bond financing.
 - (c) Capital improvement program studies.
 - (d) Replacements and refurbishment of Metropolitan facilities or portions thereof.
 - (e) Reimbursable capital projects.

The costs relating to provisions (a) through (c) above shall be paid from operating revenues, including revenues derived from water standby or availability service charges or benefit assessments, and proceeds from disposals of surplus property made available for expenditure by the Board.

M.I. 37449 - December 13, 1988; paragraph (c) added and renumbered (d) by M.I. 37530 - February 14, 1989; amended by M.I. 37679 - May 9, 1989; amended by M.I. 41580 - September 12, 1995; first paragraph and (d) amended by M.I. 43434 - March 9, 1999; paragraph (d) amended by M. I. 44907 - June 11, 2002; Section renamed, paragraph (d) amended and paragraph (e) added by M. I. 45904 - September 14, 2004; paragraph amended by M.I. 48800 - September 13, 2011; unnumbered introductory paragraph, and item(d) amended by M.I. 49187 - September 11, 2012.

§ 5114 (a). Reporting Requirements of the Treasurer.

The Treasurer shall:

(a) Render, not later than the June Board meeting, a Statement of Investment Policy for the following year, to be considered for approval by the Board.

§. 5200. Funds Established.

To provide for accountability of public moneys in accordance with applicable federal and state law and regulations and Board policies, the following funds active or prospectively active have been established in the Treasury of the District:

- (a) General Fund (Fund No. 1001, established 1929). Moneys not specifically allocated or appropriated may be placed in this fund and used for general purposes of the District. Expenditures for reimbursable work and water conservation capital and indirect costs under the contract with Imperial Irrigation District are paid from this fund.
- (b) Replacement and Refurbishment Fund (Fund No. 5001, established 1988). Used to finance certain capital program expenditures from current revenues in accordance with Section 5109, subject to the conditions contained in Section 5202(b).
- (c) State Contract Fund (Fund No. 5701, established 1960). Used for the payment of capital charges under the State Water Contract, including the capital charges for off-aqueduct power facilities, subject to the conditions contained in Section 5201(d).
- (d) Special Tax Fund (Fund No. 5702, established 1951). Annexation fees (cash payments and special tax collections) are deposited in this fund and transferred to the State Contract Fund to pay a portion of State Water Contract capital charges.
- (e) Water Revenue Fund (Fund No. 1002, established 1975). Receipts from water sales are deposited in this fund and are transferred to various other funds in accordance with revenue bond covenants and Board resolutions to pay in order of priority:
 - (1) Operation and maintenance expenditures;
 - (2) Principal of, premium, if any, and interest on the Prior Lien Waterworks Revenue Bonds and any required deposits into any reserve funds or accounts therefore;
 - (3) The interest on and bond obligation of Subordinate Lien Water Revenue Bonds and Parity Obligations issued pursuant to Master Resolution 8329 (the Master Resolution) adopted by the Board on July 9, 1991 and any Supplemental Resolutions thereto;
 - (4) All other payments required for compliance with the Master Resolution, and any Supplemental Resolutions;
 - (5) Principal of and interest on Commercial Paper Notes and other amounts due a provider of a liquidity facility;
 - (6) Deposits into the Water Standby Charge Fund in accordance with resolutions imposing such charges; and
 - (7) Any other obligations which are charges, liens, or encumbrances upon or payable from net operating revenues.

Moneys remaining at the end of each month, after the foregoing transfers, are transferred to the Revenue Remainder Fund.

(f) Operation and Maintenance Fund (Fund No. 1003, established 1975). Used to pay all operation and maintenance expenditures, including State Water Contract operation, maintenance, power and replacement charges, subject to the conditions contained in Section 5201(f).

- (g) Revenue Remainder Fund (Fund No. 1004, established 1975). Used to maintain working capital and may be used for any lawful purpose by the District, subject to the conditions contained in Section 5202.
- (h) Water Rate Stabilization Fund (Fund No. 5501, established 1987). Used to reduce future water revenue requirements or, as directed by the Board, for other lawful purposes, in accordance with Section 5202.
- (i) Water Treatment Surcharge Stabilization Fund (Fund No. 5502, established 1988). Used to mitigate required increases in the surcharge for water treatment or, as directed by the Board, for other lawful purposes, in accordance with Section 5202.
- (j) Revolving Construction Fund (Fund No. 5003, established 1988). Capital expenditures made from this fund are to be reimbursed from proceeds of security sales to the extent such expenditures are authorized uses of debt proceeds under the Act, subject to the conditions and restrictions contained in Section 5201(g).
- (k) Employee Deferred Compensation Fund (Fund No. 6003, established 1976). Compensation deferred by employees under Section 457 of the Internal Revenue Code of 1986, as amended, is deposited in this fund and is withdrawn in accordance with Articles 2 and 3 of Chapter 7 of Division VI of this Administrative Code.
- (l) Iron Mountain Landfill Closure/Postclosure Maintenance Trust Fund (Fund No. 6005, established 1990). Used as a trust fund to maintain moneys sufficient to cover the costs of closure and postclosure maintenance of the District's solid waste landfill facility at Iron Mountain, in accordance with regulations of the California Integrated Waste Management Board, and subject to the conditions contained in Section 5201(l).
- (m) Water Standby Charge Fund (Fund No. 1005, established 1992). Used to separately hold revenues attributable to water standby charges; amounts deposited in this fund are used exclusively for the purpose for which the water standby charge was authorized.
- (n) Water Transfer Fund (Fund No. 1007, established 1995). Used for moneys set aside for the purchase of water through transfers or similar arrangements, and for the costs of filling the Eastside Reservoir Project.
- (o) Self-Insured Retention fund (Fund No. 1008, established 1999). Used to separately hold amounts set aside for emergency repairs and claims against the District as provided in Section 5201(o).
- (p) Lake Mathews Multi Species Reserve Trust fund (Fund 6101, established 1997.) Used as set forth in agreement between Metropolitan and the Riverside County Habitat Conservation Agency for the Multi Species Reserve.
- (q) There shall be established in the Treasury of the District such funds and accounts as are required pursuant to bond covenants, tax and non-arbitrage certificates, bond counsel letters of instruction and related documents, to provide for accountability of District funds and compliance with applicable federal and state law and regulations. Such funds and accounts shall be established for each issue of bonds, notes or other obligations of the district as required in the respective bond or note resolution and closing documents.

(r) Water Stewardship Fund (Fund No. 1009 established 2005). Used to collect revenue from the Water Stewardship Rate and to pay costs associated with water recycling, seawater desalination, conservation, brackish water desalination, or other demand management programs. These funds can also be used to fund administrative costs associated with these programs. Funds may be used as directed by the Board, for other lawful purposes, in accordance with Section 5201(p) and Section 5202(d).

38241 - May 8, 1990; amended and paragraph (bb) added by M.I. 38305 - June 12, 1990; paragraphs (cc), (dd) and (ee) added by M.I. 38999 - June 11, 1991; amended and paragraphs (ff), (gg), (hh) and (ii) added by M.I. 39171 - August 20, 1991; paragraphs (jj), (kk), and (ll) added by M.I. 39785 - August 20, 1992; paragraph (k)(6) added, paragraph (jj) added, paragraphs (kk) - (mm) renumbered by M.I. 39925 - November 10, 1992; new paragraphs (nn) through (uu) added by M.I. 40272 - June 15, 1993; paragraph (bb) amended by M.I. 40273 -June 15, 1993; paragraphs (vv) through (bbb) added by M.I. 40388 - August 24, 1993; paragraphs (i) and (q) amended, paragraph (r) deleted and remainder of section renumbered by M.I. 40443 - September 21, 1993; paragraph (q) amended by M.I. 40976 - August 19, 1994; paragraph (bbb) added by M.I. 41581 - September 12, 1995; paragraphs (a) through (bbb) amended and new paragraphs (bbb) through (sss) added by M.I.42817 -February 10, 1998; paragraphs (ttt) through (aaaa) added April 1998, by authority granted to the General Counsel by M.I. 42817 - February 10, 1998; paragraphs (bbbb) through (jjjj) added September 1998, by authority granted to the General Counsel by M.I. 42817 - February 10, 1998; paragraph (kkkk) added by M.I. 43434 - March 9, 1999; paragraph (a) amended, old paragraphs (c), (g)-(J), (m), (n), (p), (q), (u)-(x), (bb)-(hh), (jj)-(aaa), and (ccc)-(jjjj) deleted, remaining paragraphs renumbered, and new paragraphs (q) and (r) added by M. I. 45249 - March 11, 2003; paragraph (b) amended, paragraph (e) repealed and paragraphs (f) - (r) renumbered by M. I. 45904 - September 14, 2004; new paragraph (r) added by M. I. 46266 - June 14, 2005; paragraph (g) amended by M. I. 46838 - October 10 2006.

§. 5201. Restricted Funds.

Cash and securities to be held in the various ledger funds shall be as follows:

- (a) General Obligation Bond Interest and Principal Funds and the Waterworks General Obligation Refunding Bonds Interest and Principal Funds, the cash and securities in each as of June 30, shall be at least equal to the debt service for the ensuing 18 months, less revenues anticipated to be derived from the next succeeding tax levy specifically for such debt service.
- (b) For the Waterworks Revenue Bonds Interest and Principal Funds, the Water Revenue Bonds Reserve Funds, the Water Revenue Refunding Bonds Interest and Principal Funds and the Water Revenue Refunding Reserve Bonds, the cash and securities in each shall be at least equal to the minimums required by the resolutions of issuance for such bonds.
- (c) For the Bond Construction Funds there shall be no minimum requirements; provided that any cash and securities in such funds shall be restricted to use for the purposes such finances were required.
- (d) For the State Contract Fund, cash and securities on hand June 30 and December 31 shall equal the capital payments to the State Department of Water Resources that are due on July 1 of the same year and January 1 of the following year, respectively.
 - (e) For the Special Tax Fund, there shall be no minimum requirement.
- (f) For the Operation and Maintenance Fund, cash and securities shall be at least equal to the minimum required by the resolutions of issuance for revenue bonds.
- (g) For the Revolving Construction Fund, there shall be no minimum requirement. Cash and securities in this fund, unless restricted as to use by resolution of the Board, shall be available for transfer to

the Water Rate Stabilization Fund and the Water Treatment Surcharge Stabilization Fund at the discretion of the Board.

- (h) For the Commercial Paper, Series A, Note Payment Fund, and the Commercial Paper, Series B, Note Payment Fund, the District shall deposit amounts sufficient to pay principal of, and interest on, such Commercial Paper Notes in an amount at least equal to one-half of the projected interest payments due on such notes in the subsequent fiscal year.
- (i) For the Water Standby Charge Fund, there shall be no minimum requirement; provided that any cash and securities in such fund shall be restricted to use for the purposes such moneys were authorized.
- (j) For the General Obligation Bond Excess Earnings Funds, the Waterworks General Obligation Refunding Bond Excess Earnings funds, the Water Revenue Bond Excess Earnings Funds and the Water Revenue Refunding Bond Excess Earnings Funds, the minimum requirement shall be the amounts deposited into this fund in accordance with the provisions of the Tax and Nonarbitrage Certificates and Resolutions for the Bonds.
- (k) For the Waterworks General Obligation Refunding Bonds, 1993 Series A1 and A2, Escrow Account Fund, the minimum requirement shall be the amounts necessary to pay the principal, if any, and the interest on the Series A1 and A2 Bonds to the crossover date, and to defease certain maturities of outstanding prior general obligation bonds.
- (l) For the Iron Mountain Landfill Closure/Postclosure Maintenance Trust Fund, cash and securities as of June 30, shall be at least equal to the Chief Executive Officer's latest estimates of closure and postclosure maintenance costs.
- (m) For the Optional General Obligation Bond Redemption Fund and the Optional Revenue Bond Redemption Fund, the minimum requirement shall be the amount necessary to redeem such untendered, refunded bonds which have been called for redemption.
- (n) For the Water Transfer Fund, all amounts budgeted or pledged for purchase of water through transfers or similar arrangements, and for the costs of filling the Eastside Reservoir Project, shall be set aside in such fund and used solely for such purpose.
- (o) For the Self-Insured Retention fund, all amounts in such fund shall be set aside and used solely for emergency repairs and claims against the District. The minimum cash and securities to be held in such fund as of June 30 of each year shall be \$25 million.
- (p) For the Water Stewardship Fund, there shall be no minimum requirement; all amounts in such fund shall be used to fund the Conservation Credit Program, Local Resources Program, seawater desalination, brackish water desalination, and similar demand management programs, including the departmental operations and maintenance costs for administering these programs.

Section 331.1 - 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]; paragraph (f) [formerly Section 331.1.6] added by M.I. 35309 - September 11, 1984. Section 331.1 repealed and Section 5200 adopted by M.I. 36464 - January 13, 1987, effective April 1, 1987; amended by M.I. 36676 - June 9, 1987; paragraph (g) added by M.I. 37449 - December 13, 1988; renumbered to Section 5201 and paragraphs (a) and (c) amended by M.I. 38241 - May 8, 1990; paragraph (c) amended and paragraph (h) added by M.I. 38999 - June 11, 1991; paragraphs (b) and (c) amended by M.I. 39171 - August 20, 1991; paragraphs (b) and (c) amended by M.I. 39785 - August 20, 1992; paragraph (i) added by M.I. 39925 - November 10, 1992; paragraphs (a)(b)(c) amended and 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.

§. 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 \$95 million. Available monies in excess of \$95 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. Capitalized terms not defined in this paragraph shall have the meanings assigned to such terms in the Master 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.

§. 5203. Indirect Credit of District.

The Chief Executive Officer 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 Chief Executive Officer shall make a review to determine whether the minimum fund requirements outlined in this Chapter have been met and whether the District has 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 Chief Executive Officer, after consulting with the General Counsel, shall report the results of his review in writing to the Board of Directors annually.

Section 331.4 - M.I. 34190 - April 13, 1982. Section 331.4 repealed and Section 5203 adopted by M.I. 36464 - January 13, 1987, effective April 1, 1987; amended by M.I. 36676 - June 9, 1987; renumbered to Section 5204 by M.I. 38241 - May 8, 1990

OPERATING POLICIES

O.P. NUMBER	TITLE	ISSUE DATE	REVISION DATE
F-01	Operating, Expensed and Capital Equipment	3/17/97	5/29/02

SUMMARY

This policy relates to the purchase, assignment, tracking, maintenance, and retirement of operating, expensed and capital (OEC) equipment.

SUPERSESSION

This Operating Policy supersedes Operating Policy F-01 dated March 17, 1997.

AUTHORITY

The Chief Executive Officer (CEO) delegates the authority to establish and maintain OEC equipment policies and procedures to the Chief Financial Officer and Business Services Section, respectively.

DEFINITIONS

Operating Equipment: a discrete piece of equipment that is not a component part of a fixed asset or stationary facility. The equipment must have:

- An original purchase cost equal to or greater than \$5,000. The capitalized amount includes the cost of the equipment, tax, transportation, delivery, third-party installation, and other acquisition costs.
- A useful life of at least five years from the date of acquisition (four years for vehicles).

Expensed Equipment: a discrete piece of equipment that is not a component part of a fixed asset or stationary facility and has an original purchase cost of less than \$5,000. Attachments and improvements to expensed equipment are also expensed.

• <u>Trackable</u>: expensed equipment that must be tracked because it is loss prone or incurs monthly charges. Items that incur monthly charges, such as cell phones, are tracked by their coordinators.

Nontrackable: those pieces of expensed equipment that do not meet the criteria stated above.

Capital Equipment: equipment that is charged to capital projects and entered at zero cost in the Oracle Asset Tracking System (OATS).

POLICIES

- 1. Operating equipment is purchased through the operating equipment appropriation and general fund. Operating equipment is capitalized and depreciated.
- 2. Expensed equipment is acquired through the Operations and Maintenance (O&M) budget fund under the Equipment Expensed account. Expensed equipment is not capitalized.
- 3. Capital equipment is charged to the appropriate capital project. Operating equipment purchased to support a capital project or contract is depreciated against the life of the project. When the equipment is sold, the net proceeds are credited against the project cost.
- 4. Metropolitan assets classified as OEC equipment are purchased, received, tracked, and retired in the operating equipment database (OATS). Access to the OATS database is granted only to regular employees.
 - OEC equipment is assigned only to regular employees by their managers or supervisors.
 - Upon receipt, OEC equipment is barcoded by designated site receivers or their alternates.
- 5. Operating equipment upgrades extend the life or increase the functional capability of major pieces of operating equipment and are capitalized, provided the upgrade meets the following criteria:
 - Cost exceeds \$5,000
 - Cost is greater than 50% of the original total purchase price of the equipment
 - Upgrade extends the estimated life of the equipment by at least three years

O.P. NUMBER	TITLE	ISSUE DATE	REVISION DATE
F-07	Capitalization & Retirement of Plant Assets	3/6/02	3/12/0

SUMMARY This document establishes the policies governing the

capitalization and retirement of plant assets.

SUPERSESSION This Operating Policy supersedes Operating Policy F-07 originally

issued September 23, 1998; revised March 6, 2002.

AUTHORITY The General Manager delegates the authority to establish and

maintain policies regulating the capitalization and retirement of plant assets to the Chief Financial Officer/Assistant General Manager or

designee.

DEFINITIONS Component Equipment — equipment considered to be part of

a plant, usually determined when the item is permanently affixed in one location (as opposed to operating equipment as defined

in Operating Policy F-01, Operating, Expensed and

Capital Equipment).

Plant Assets — a new facility, betterment,

replacement/refurbishment, or equipment which is a component part of a plant and that has both:

- A total cost of at least \$50,000
- A useful life of at least five years

Replacement/Refurbishment — the substitution/repair of a new facility or component of an existing facility. A replacement always involves a replacement of facilities or component, and a refurbishment may involve the replacement of facilities or component.

Retirement — the result of the replacement of existing facilities with new facilities designed to accomplish the same function, or as the result of the sale or abandonment of facilities that are no longer of economic use.

Service Connection — a pipeline, with its appurtenances, that branches off or connects the water distribution system to customer facilities.

Integrated Software — computer software that is integrated into and necessary to operate general plant and equipment (e.g., Supervisory Control and Data Acquisition system [SCADA], telephone system, and computer-operated lathes), rather than perform an application.

POLICIES

- 1. Any item of cost that conforms to the criteria of plant assets shall be capitalized as a plant asset; otherwise the cost is charged to operations and maintenance expense.
- 2. When multiple components of a plant asset are acquired or built, and the components have individual costs of less than \$50,000, the cost of these items is an operations and maintenance expense. If the components have useful lives of five years or more, they are capitalized when:
 - The aggregate total costs exceed \$50,000, and
 - The components are added simultaneously or within a planned short period of time.
- 3. Service connections are capitalized as plant assets and are not subject to the \$50,000 cost criterion. Customers pay the cost of acquiring and installing service connections. The customer contribution is recorded as contributed capital.
- 4. Integrated software is considered part of the plant and equipment of which it is an integral part and capitalized and depreciated accordingly. The aggregate cost of the hardware and software is used to determine whether to capitalize or expense the costs.
- 5. Replacement or refurbishment costs are charged to operations and maintenance expense provided such costs do not exceed the capital cost and useful life criteria for the assets involved.
- 6. Plant assets replaced, sold or abandoned are removed from accounting records. The Engineering Services Section notifies the Controller of plant assets to be retired.
- 7. Costs of replacement plant assets are accumulated under separate and identifiable project numbers. Project descriptions identify, to the extent practicable, the plant assets being retired.

STATEMENT OF INVESTMENT POLICY (June 09, 2015)

I. INVESTMENT AUTHORITY

In accordance with Section 53600 et seq. of the Government Code of the state of California, the authority to invest public funds is expressly delegated to the Board of Directors for subsequent redelegation to the Treasurer. Investments by the Treasurer pursuant to the delegation hereby made by this Statement of Investment Policy are limited to those instruments specified by the Board in Section 5101 of the Metropolitan Water District Administrative Code, and as further defined in this Statement of Investment Policy.

II. STATEMENT OF OBJECTIVES

Per Section 53600.5 of the California Government Code, the primary objective of the Treasurer shall be to safeguard the principal of the funds under his control when investing public funds.

The secondary objective shall be to meet all liquidity requirements and the third objective shall be to achieve a return on the funds under his control.

In order of priority, three fundamental criteria shall be followed in the investment program:

- 1. Safety of Principal Investments shall be undertaken in a manner which first seeks to ensure the preservation of principal in the portfolio. Each investment transaction shall be entered into after taking into consideration the quality of the issuer, the underlying security or collateral, and diversification of the portfolio. Cash flow analysis will be conducted and utilized to avoid the need to sell securities prior to maturity and to reduce market risk.
- 2. Liquidity In an effort to ensure that Metropolitan's portfolio will be sufficiently liquid to meet current and anticipated operating requirements, a cash flow analysis will be performed on an ongoing basis. Investments shall be made so that the maturity date is compatible with cash flow needs and safety of principal.
- Return on Investment Investments shall be undertaken to produce an acceptable rate of return after first considering safety of principal and liquidity and the prudent investor standard.

The Investment Strategy is subordinate to the Statement of Objectives, i.e., implementing the investment strategies listed below is not intended to supersede the objectives of Safety, Liquidity and Return.

Investment Programs - The portfolio is divided into long-term, short-term and bond reserves segments. The long-term segment of the portfolio will be actively managed, and performance measured against the Bank of America Merrill Lynch, Corporate and Government, 1 to 5 years, A Rated and above index or other index determined by the Finance and Insurance Committee. The duration of the long-term segment will be limited to the duration of the index plus or minus 1.5.

The short-term segment of the portfolio will be managed to meet Metropolitan's cash flow needs. The total return of the short-term segment of the portfolio will be measured against the total return of the Bank of America Merrill Lynch 3-Month Treasury Bill index, or other index determined by the Finance and Insurance Committee. The duration of the short-term segment is limited to the duration of the index plus or minus 0.2. Also, for purposes of the duration calculation, Local Agency (e.g., a California municipality), securities that provide Metropolitan the

right to redeem the security at par on a daily, weekly, or monthly basis will be considered to have a maturity of no more than 30 days.

The bond reserves segment shall be invested in high quality securities, with the goal of earning a return that minimizes any potential negative arbitrage experienced by each bond reserve fund. The bond reserve funds may be invested in securities issued by a Local Agency including securities issued by Metropolitan. Bond reserve funds may also be invested in money market and fixed income investments.

All investment activity shall be consistent with the prudent investor standard.

III. PRUDENT INVESTOR STANDARD

As applicable to Metropolitan and its fiduciaries, the prudent investor standard is a standard of conduct whereby any person authorized to make investment decisions on behalf of Metropolitan acts with care, skill, prudence and diligence under the circumstances then prevailing, including but not limited to, the general economic conditions and the anticipated needs of Metropolitan, that a prudent person acting in like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and meet the liquidity needs of Metropolitan.

IV. **PORTFOLIO**

Any reference to the portfolio shall mean the total of Metropolitan's cash and securities under management by the Treasurer, excluding cash and securities held in escrow or trust on behalf of Metropolitan. The Treasurer may invest in any security authorized for investment under the state law, subject to the limitations described herein:

1. Maturity Limitations

a. The Treasurer is authorized to invest special trust funds in investments with a term to maximum maturity in excess of five years. These funds include, but are not limited, to the following:

Water Revenue Bond Reserve Funds

Escrow Funds

Debt Service Funds

Iron Mountain Landfill Closure

Post closure Maintenance Fund

Lake Mathews Conservancy

- b. For certain instruments, the term of the investment is limited by market convention or as otherwise prescribed herein.
- c. The Short-Term portfolio may be invested in United States Treasury, Federal Agency and California Local Agency securities (including securities issued by Metropolitan) with stated maturities in excess of five years. All other securities held in the short-term portfolio are

limited to maximum maturities of 5 years or as otherwise specified in Section V, Authorized Securities.

d. The Long-Term portfolio may be invested in United States Treasury and Federal Agency securities with maturities in excess of five years.

2. <u>Investment Transactions</u>

- a. Information concerning investment opportunities and market developments will be gained by maintaining contact with the financial community.
- b. Confirmations of all investment transactions will be sent directly to the Controller for audit.
- c. Annually the Treasurer shall transmit a copy of the current Statement of Investment Policy to all approved dealers. Each dealer is required to return a signed statement indicating receipt and understanding of Metropolitan's investment policies.
- d. When practical, the Treasurer shall solicit more than one quotation on each trade. All investment trades will be awarded on a competitive bid basis.
- e. Each day's listing of market indices and quotations shall be recorded and retained by the Treasurer for a period of five years.

3. Sale of Securities

a. Securities may be sold to provide needed liquidity, to restructure the portfolio to reduce risk or to increase the expected return of the portfolio. In no instance shall a sale of securities be used for speculative purposes.

4. Prohibited Investments

a. Prohibited investments include inverse floaters, range notes, interest only strips derived from a pool of mortgages (Collateralized Mortgage Obligations), and any security that could result in zero interest accrual if held to maturity. (Zero interest accrual means the security has the potential to realize zero earnings depending upon the structure of the security. Zero coupon bonds and similar investments that start at a level below the face value are legal because their value increases.)

5. <u>Portfolio Adjustments</u>

- a. Portfolio percentage limitations for each category of investment are applicable only at the date of purchase. Should an investment percentage of portfolio limitation be exceeded due to an incident such as a fluctuation in portfolio size, the portfolio manager is not required to sell the affected securities.
- b. Should a security held in the portfolio be downgraded below the minimum criteria included in this Statement of Investment Policy, the Treasurer or investment manager shall sell such security in such a manner to minimize losses on the sale of such security. If the security is downgraded to a level that is less than investment grade, the Treasurer or investment manager shall sell such affected security immediately; however, if immediate liquidation of the security 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. If the security matures within 60 days of the rating change, the Treasurer or investment manager may choose not to sell the security. The Treasurer shall include a description of any securities that have been downgraded below investment grade and the status of their disposition in his monthly report.

6. Safekeeping

- a. All securities transactions, including collateral for repurchase agreements entered into by Metropolitan shall be conducted on a delivery versus payment (DVP) basis.
- b. Securities will be held by an independent custodian designated by the Treasurer and held in safekeeping pursuant to a safekeeping agreement.
- c. All financial institutions that provide safekeeping services for Metropolitan shall be required to provide reports or safekeeping receipts directly to the Controller to verify securities taken into their possession.

V. **AUTHORIZED INVESTMENTS**

Money market securities described in this section must be of prime quality of the highest letter and number rating (A1, P1, F1 or higher) as provided by a nationally recognized statistical rating organization (NRSRO). NRSRO for the purpose of this section are Moody's Investors Service, Standard and Poor's Ratings Services, and Fitch Ratings. Money market securities include Bankers' Acceptances, Commercial Paper, Negotiable Certificates of Deposit, and Time Deposits.

1. <u>U.S. Government and Agencies</u>

- a. Investments in individual U.S. Treasury and Federal Agency securities shall not be subject to any maturity limitations, provided that the duration of the portfolio managed by any manager in which such investments are held does not exceed the applicable limitation described under "STATEMENT OF OBJECTIVES Investment Strategy" above.
- b. Investments in Treasury or Federal Agency obligations shall not exceed 100 percent of all investments.
- c. United States Treasury securities consist of notes, bonds, bills or certificates of indebtedness, or those for which the faith and credit of the United States are pledged for the payment of principal and interest.
- d. Federal Agency securities consist of obligations, participations, or other instruments issued by United States federal agencies or government-sponsored enterprises, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises.

2. <u>Banker s' Acceptances</u>

Restrictions are as follows:

a. Investments in prime bankers' acceptances may not exceed 40 percent of the portfolio in effect on the date of purchase of any such investment.

- b. No more than 25 percent of this category of investments may be invested in any one commercial bank's acceptances.
- c. The maximum maturity shall be limited to 180 days.

3. Negotiable Certificates of Deposit

Restrictions are as follows:

- a. Investments in negotiable certificates of deposit may not exceed 30 percent of the total portfolio in effect on the date of purchase of any such investment.
- b. The total investment in an eligible financial institution shall not exceed 25 percent of the total portfolio available for investment in this investment category.
- c. To be eligible, a negotiable certificate of deposit must be issued by a nationally or state-chartered bank, a state or federal savings and loan association or savings bank, or by a state-licensed branch of a foreign bank.
- d. The investment shall not exceed the shareholders' equity of any depository bank. For the purpose of this constraint, shareholders' equity shall be deemed to include capital notes and debentures.
- e. The investment shall not exceed the total of the net worth of any depository savings and loan association, except that investments up to a total of \$500,000 may be made to a savings and loan association without regard to the net worth of that depository, if such investments are insured or secured as required by law.
- f. The maximum maturity shall be limited to two years.

4. Commercial Paper

Restrictions are as follows:

- a. Investments in commercial paper shall not exceed 25 percent of the portfolio in effect on the date of purchase of any such investment.
- b. Each investment shall not exceed 270 days maturity.
- c. No more than 10 percent of the outstanding commercial paper of an issuing corporation may be purchased. In addition, the entity that issues the commercial paper shall meet the following conditions in Option 1 or Option 2:

Option 1:

- a. Is organized and operating in the United States as a general corporation and has total assets in excess of \$500 million.
- b. Has debt other than commercial paper, if any, that is rated "A" or higher by a nationally recognized rating agency.

Option 2:

- Is organized within the United States as a special purpose corporation, trust or limited liability company.
- b. Has program-wide credit enhancements including, but not limited to, over-collateralization, letters of credit or surety bond.
- c. Has commercial paper that is rated "A-1" or higher by a nationally recognized rating agency.

5. Repurchase Agreements

A repurchase agreement is a purchase of authorized securities (other than commercial paper) with terms including a written agreement by the seller to repurchase the securities on a later specified date for a specified amount. Restrictions are as follows:

- a. The percentage limit for investment in repurchase agreements shall be 50 percent of the total portfolio.
- b. Purchases of repurchase agreements will be limited to a maximum maturity of one year.
- c. Repurchase agreements shall be made only with primary dealers in government securities or financial institutions with a Moody's Investors Service, Inc., or equivalent, rating of A or better.
- d. Such investments shall provide for purchased securities with a market value at least 102 percent of the amount of the invested funds. Value shall be adjusted not less than quarterly.
- e. Purchased securities are limited to Treasury bills, bonds and notes, or other investments that are direct obligations of or fully guaranteed as to principal and interest by the United States or any agency thereof; negotiable certificates of deposit; and bankers' acceptances eligible for acceptance under Federal Reserve rules. Zero coupon and stripped coupon instruments are not acceptable.
- f. Such investments shall provide for transfer of ownership and possession of the purchased securities either to Metropolitan directly or to a custodian depository institution which shall take record title and shall establish and maintain a subaccount in its financial records for the securities in Metropolitan's name, and such custodian shall not be the dealer from which the securities were purchased.
- g. Each repurchase agreement shall provide a contractual right to liquidation of the purchased securities upon the bankruptcy, insolvency or other default of the counterparty.
- h. Purchased securities shall have maturities within 60 months of the date of investment.

6. Reverse Repurchase Agreements

A reverse repurchase agreement is a sale by the Treasurer of securities in the portfolio with terms including a written agreement to repurchase the securities on or before a specified date for a specified amount.

- a. Subject to the approval of the Board of Directors, the Treasurer may enter into a reverse repurchase agreement provided that the proceeds are invested solely to supplement the income normally received from the securities involved in the agreement. These agreements shall only be performed with primary dealers of the Federal Reserve Bank of New York.
- b. Reverse repurchases may be entered into to meet temporary liquidity needs and not for leverage.
- c. Investments in reverse repurchase agreements are limited to 20 percent of the base value of the portfolio. For the purpose of this constraint, base value of the portfolio shall be the total of Metropolitan's cash and securities under management by the Treasurer, excluding any amounts obtained through selling securities by reverse purchase agreements, securities lending agreements, or similar borrowing methods.
- d. The investment purchased with the proceeds of a reverse repurchase agreement must match or closely approximate the maturity of the reverse repurchase agreement(s).
- e. Purchases of securities with proceeds from reverse repurchase agreements may not be subject to a reverse repurchase agreement.
- f. Reverse repurchase agreements will be limited to a maximum maturity of 92 days.
- g. Securities used to make reverse repurchase agreements must be paid for and held for a minimum of 30 days prior to the transaction.

7. Time Deposits

For purposes of this policy, collateralized time deposits shall be considered investments.

The following criteria will be used in evaluating financial institutions and the form of collateral to determine eligibility for deposits:

- a. The financial institution must have been in existence for at least five years.
- b. Credit requirements may be waived for the maximum deposit amount that is insured by the Federal Deposit Insurance Corporation.
- c. The deposit shall not exceed the shareholders' equity of any depository bank. For the purposes of this constraint, shareholders' equity shall be deemed to include capital notes and debentures.
- d. The deposit shall not exceed the total of the net worth of any depository savings and loan association, except that deposits not exceeding a total of five hundred thousand

dollars (\$500,000) may be made to a savings and loan association without regard to the net worth of that depository, if such deposits are insured or secured as required by law.

- e. The total deposits shall not exceed the shareholders' equity of any depository bank.
- f. In order to secure such deposits, the financial institution shall maintain in the collateral pool, securities having a market value of at least 10 percent in excess of the total amount deposited.
- g. Promissory notes secured by real estate mortgages or deeds of trust may not be accepted as collateral.
- h. When other factors are equal, appropriate consideration will be given to a financial institution that either individually or as a member of a syndicate bids on or makes a substantial investment in Metropolitan's bonds; contributes service to Metropolitan or a member public agency; or offers significant assistance to Metropolitan, in order to provide for distribution of total deposits among eligible financial institutions.
- i. Purchased time deposits will be limited to a maximum maturity of one year.

8. Medium-Term Notes

Restrictions are as follows:

- a. Investment in medium-term notes are limited to corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States.
- b. Notes eligible for investment shall be rated in a rating category of at least "A" or its equivalent or better by a nationally recognized rating service.
- c. Purchases of medium-term notes may not exceed 30 percent of the portfolio.
- d. Purchases of medium-term notes will be limited to a maximum maturity of five years.
- e. The total investment in the medium-term notes of an issuer shall not exceed 25 percent of the total portfolio available for investment in this investment category.

9. Mortgage Obligations and Asset Backed Securities

This category of investments includes any mortgage pass-through security, collateralized mortgage obligation, mortgage-backed or other pay-through bond, equipment lease-backed certificate, consumer receivable pass-through certificate, or consumer receivable-backed bond.

Restrictions are as follows:

 Mortgage pass-through, collateralized mortgage obligation, mortgage-backed or other pay-through bond, equipment lease-backed certificate, and consumer receivable pass-through certificate are subject to a maximum maturity of five years.

- b. Securities eligible for investment shall be issued by an issuer having an "A" or higher rating for the issuer's debt as provided by a nationally recognized rating service and rated in a rating category of "AAA" by a nationally recognized rating service.
- c. Purchase of securities authorized by this subdivision may not exceed 20 percent of the portfolio.
- d. The total investment in the mortgage-backed or asset-backed securities of an issuer shall not exceed 25 percent of the total portfolio available for investment in this category.

10. Local Agency Investment Fund Deposits

Deposits for the purpose of investment in the Local Agency Investment Fund of the State of California may be made up to the maximum amount permitted.

11. Shares of Beneficial Interest

The Treasurer may invest in shares of beneficial interest issued by eligible diversified management companies that (1) invest in authorized securities such as United States Treasury notes, bonds, bills; registered state warrants or treasury notes and bonds for the State of California, obligations of local agencies; commercial paper; negotiable certificates of deposit; repurchase agreements or reverse repurchase agreements and medium term notes or (2) are money market funds registered with the Securities and Exchange Commission under the Investment Company Act of 1940. These companies must meet the following criteria:

- a. Attain the highest ranking of the highest letter and numerical rating provided by not less than two nationally recognized statistical rating agencies.
- b. Retain an investment adviser registered or exempt from registration with the Securities and Exchange Commission with not less than five years' experience investing in authorized securities and obligations listed above.
- c. Assets under management shall be in excess of \$500 million.
- d. The purchase price of the shares of beneficial interest purchased shall not include any commission that the companies may charge and shall not exceed 20 percent of the Portfolio. However, no more than 10 percent of the Portfolio may be invested in shares of beneficial interest of any one mutual fund described above.

12. <u>Investment Contracts</u>

Funds held by a trustee or fiscal agent and pledged to the payment or security of bonds may be invested in accordance with the statutory provisions governing the issuance of those bonds or other forms of debt. These funds may also be invested in accordance with the ordinance, resolution, indenture or agreement executed by Metropolitan. Other forms of debt include, but are not limited to, the following: (a) obligations under a lease, and (b) an installment sale or other agreements. Eligible investments would consist of the following:

a. Guaranteed Investment Contracts

- b. Forward Delivery Agreements collateralized with U.S. Treasury or Agency Securities
- c. Other investment contracts collateralized with U.S. Treasury or Agency Securities
- d. These investments may be purchased with maturities in excess of five years as noted in Section IV 1. of this policy.

13. California Local Agency Securities

- a. Investments in California local agency securities, including securities issued by Metropolitan, shall not be subject to any maturity limitations, provided that the duration of the portfolio managed does not exceed the applicable limit described under "STATEMENT OF OBJECTIVES Investment Strategy."
- b. California local agency securities with a maturity in excess of five years must have a credit rating of at least AA (may be insured) and an underlying credit rating of A or better by a nationally recognized rating service
- c. The purchase of California local agency securities may not exceed 30 percent of the portfolio.
- d. The total investment in California local agency securities of an issuer shall not exceed 25 percent of the total portfolio available for investment in local agency securities. Investments in Metropolitan's tendered bonds may exceed the 25 percent limitation by issuer.
- e. The maximum limit of 30 percent specified in c. of this section is waived to the extent that such investments are for the purpose of purchasing Metropolitan's tendered bonds as a temporary investment. In other words, the investment portfolio may consist of Metropolitan-issued debt in amounts greater than 30 percent, but only Metropolitan securities.

VI. **REPORTING**

In accordance with Administrative Code Section 5114, the Treasurer shall submit a monthly report to the Board Executive Secretary of the Board of Directors via the General Manager indicating the types of investment by fund and date of maturity, and shall provide the current market value of all securities, rates of interest, and expected yield to maturity. The Treasurer shall also submit a monthly summary report to the Board of Directors via the General Manager showing investment activity, including yield and earnings, and the status of cash by depository.

VII. MONITORING SAFETY AND LIQUIDITY OF DISTRICT FUNDS

The Treasurer shall monitor or cause to be monitored the extent to which financial institutions with which Metropolitan maintains deposits or investments are consistent with Metropolitan's policies regarding business activities within countries that may jeopardize the safety and liquidity of Metropolitan funds or violate other Metropolitan policies. Such matters shall be reported to the Finance and Insurance Committee as part of the Treasurer's monthly report.

VIII. ADMINISTRATION

The Treasurer may, at any time, establish more restrictive requirements for the securities approved for investment as deemed appropriate in this Statement of Investment Policy. These restrictions may include, but are not limited to, higher credit ratings, lower percentage limits by security type or issuer, shorter maturities and additional collateral for repurchase agreements.

GLOSSARY OF TERMS

20 x 2020 — 2009 Water Conservation Act goal of twenty percent reduction in per capita regional water use by 2020.

ACE — Association of Confidential Employees; an employee bargaining unit at Metropolitan.

Accrual — An accounting method that records revenues when earned and expenses when incurred regardless of the timing of when the cash is actually paid or received.

Acre-Foot — A unit of measure equivalent to 325,851.4 gallons of water and weighs approximately 62.4 pounds, which meets the needs of two average families in and around the home for one year.

ACWA — Association of California Water Agencies.

AFSCME — American Federation of State, County, and Municipal Employees.

Appropriation — Money set aside for a specific purpose. The designation of the use to which a fund of money is to be applied.

Area of Origin — An area where the headwaters of a river or other significant water body originates. The "area" may be a county, region, or other geographic region of the state.

Area of Origin Litigation — Solano County Water Agency v. Department of Water Resources. In this litigation, Solano County Water Agency and other State Water Project Contractors including Butte County, Yuba City, and Napa County Flood Control and Water Conservation District who serve water to northern California communities in the areas of origin filed suit claiming rights to an increased share of the State Water Project water based on the area of origin statutes. The area of origin statutes can be used to prioritize water rights in the area that the water originated.

Assembly Bill 1234 — This bill requires a local agency that provides reimbursement for expenses to members of its legislative body to adopt a written policy on the duties for which legislative body members may receive compensation, other than meetings of the legislative body or an advisory body or attendance at a conference or organized educational activity. The bill requires such a governing body to adopt a written policy concerning what occurrences qualify a member to receive reimbursement of expenses for travel, meals, and lodging and would impose related requirements, including the filing of expense reports, which would be public records.

Assembly Bill 32 — The Global Warming Solutions Act of 2006, is California's landmark global warming legislation. It will reduce California greenhouse gas emissions (GHG's) to 1990 levels by 2020 and to 80 percent below 1990 levels by 2050.

Assembly Bill 72 — This bill changed the date that newly elected Municipal Water Directors begin their term from the first Monday after January to the first Friday in December.

Assembly Bill 803 — (also known as the Water Recycling Act of 2013) – This bill harmonizes recycled water spill reporting requirements and authorizes Regional Water Quality Control Boards to permit the introduction of Advanced Treated Purified Water into conveyance systems prior to comingling with any raw water or other water source.

Assembly Bill 850 — This bill amended the Joint Exercise of Powers Act of the California Government Code to allow Joint Powers Authorities (JPAs) to issue rate reduction bonds which would be used to fund certain capital investments of municipally owned California water utilities.

AWWA — American Water Works Association.

Bay Delta — An environmentally sensitive area of the Sacramento/San Joaquin River Delta through and from which water flows to reach portions of California from the San Francisco Bay Area to San Diego. Moving water across the delta during the high-demand summer months is becoming more difficult as additional water is set aside to mitigate for environmental impacts.

BDCP — Bay Delta Conservation Plan. A long-term conservation strategy that sets forth actions needed for a healthy Delta.

Budget — A report of all anticipated expenditures and required reserves and the source of moneys to be used to meet such expenditures and provide such reserves.

Budgeted Position — A staff position approved by the Board of Directors for the fiscal year.

Business Outreach — This program's intent is to solicit participation in the performance of all construction contracts, professional services contracts, and procurement of supplies and equipment for Metropolitan by all individuals and businesses, including but not limited to small, locally owned, women owned, minority owned, and economically disadvantaged business enterprises.

California WaterFix (CA WaterFix) — The new permitting approach and associated new alternatives to the BDCP that would be implemented under a different Endangered Species Act regulatory permitting process (Section 7 versus Section 10[a]) as proposed by Governor Brown on April 30, 2015. This would fulfill the requirement of the 2009 Delta Reform Act to contribute toward meeting the coequal goals of providing a more reliable water supply for California and protecting, restoring and enhancing the Delta ecosystem.

CDPH — California Department of Public Health.

Capacity Charge — Recovers the cost of providing peak water service capacity within the distribution system. Member agencies pay the capacity charge based on their maximum daily flow during the summer months.

Capital Investment Plan (CIP) — Metropolitan's CIP is designed to refurbish existing facilities needed to ensure a reliable distribution system, expand treatment facilities to meet current and future water quality regulations, and expand storage and conveyance facilities to meet current and future storage requirements.

Capital Project — A project that results in a new asset (e.g., a facility, betterment, replacement, equipment, etc.) that has a total cost of at least \$50,000 and a useful life of at least five years. Computer software can be capitalized if it costs \$250,000 or more and has a useful life of at least three years.

CARB — California Air Resources Board. This is the "clean air agency", a regulatory department within the California Environmental Protection Agency. The goals of CARB include attaining and maintaining healthy air quality; protecting the public from exposure to toxic air contaminants; and providing innovative approaches for complying with air pollution rules and regulations.

The California Environmental Quality Act (CEQA) — A statute that requires state and local agencies to identify the significant environmental impacts of their actions, and to avoid or mitigate those impacts, if feasible.

Chromium 6 — Occurs naturally in the environment from the erosion of natural chromium deposits and industrial processes. People who use water containing total chromium in excess of the maximum contaminant level (MCL) over many years could experience allergic dermatitis.

Colorado River Aqueduct (CRA) — The 242-mile-long water conveyance system built by Metropolitan to carry water from the Colorado River to its Southern California service area.

Conservation Credits Program (CCP) — A program where Metropolitan provides financial assistance for the development of conservation programs at the local level (e.g. energy efficient washing machines, low flush toilets, etc.).

CUWCC — California Urban Water Conservation Council, a non-profit 501c3 formed as a partnership of water suppliers, environmental groups, and others interested in conserving California's greatest natural resource, water.

DHCCP — Delta Habitat Conservation and Conveyance Program. Formed in 2008 as a result of demands to protect the Delta, prompting studies to assess potential habitat restoration and water conveyance options. DHCCP will conduct an environmental review of the BDCP.

Debt Service — The annual cost of repaying outstanding debt.

Department of Water Resources (DWR) — A department within the California Resources Agency which is responsible for the state's management and regulation of water usage.

Distribution System — Refers to the network of pipelines and canals used for the conveyance of water from Metropolitan's terminal reservoirs to member agency service connections.

DVL — Diamond Valley Lake. A reservoir built by Metropolitan with a capacity of 800,000 AF.

EIR — Environmental Impact Report.

EMS — Energy Management System.

Endangered Species Act (ESA) — An act of the federal government enacted in 1973 that provides for the conservation of species that are endangered or threatened and the conservation of the ecosystems on which they depend. A species is considered endangered if it is in danger of extinction throughout all or a significant portion of its range. A species is considered threatened if it is likely to become an endangered species within the foreseeable future.

Enterprise Fund — To account for operations that are financed and operated where the intent is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges.

Ethics Program — State law (SB 60) mandates that Metropolitan maintain a program to address and seek to avoid potential ethical abuses relating to business relationships, solicitation and/or receipt of campaign contributions, and public notice and approval procedures for contracts of \$50K or more. This program includes on-going training for board members and employees regarding ethics in the workplace.

FCC — Federal Communications Commission.

FERC — Federal Energy Regulatory Commission.

Fee Property — An estate in land for which Metropolitan has full ownership, generally referred to as fee simple absolute.

Fund — A self- balancing set of accounts recording cash and other financial resources, together with all related liabilities and residual equities or balances, and changes therein, which are segregated for the purpose of carrying on specific activities or attaining certain objective in accordance with special regulations, restrictions, or limitations.

Fund Balance — Created from excess revenues over expenditures. This can be a combination of collections/revenues being higher than budget and actual expenditures being lower than budget.

GFOA — Government Finance Officers Association.

IID/Metropolitan Conservation Agreement — Water conservation agreement with the Imperial Irrigation District (IID) that allows for the development of certain water conservation capital structures by Metropolitan in the Imperial Valley. Metropolitan, in turn, gets the quantity of water conserved during the term of this agreement, four years during construction, and 35 years after completion. It encompasses both the operating and maintenance, indirect, and capital cost of developing and implementing the program. This agreement is renewable.

Information Technology Strategic Plan (ITSP) — A roadmap for investment in IT projects over the next 3 to 5 years.

IRWMP — Integrated Regional Water Management Plan.

Integrated Resources Plan (IRP) — An open and participatory planning process that takes a broad view of all water resource options available to the region and searches for the right combination of investments to achieve water supply objectives in a cost-conscious and environmentally responsible manner.

Local Resources Program (LRP) — A program in which Metropolitan provides financial assistance to its member agencies for the development of local groundwater recycling and groundwater recovery projects.

Member Agency — Refers to any of the 26 cities or public water agencies that comprise the Metropolitan Water District and whose representatives constitute the Board of Directors of Metropolitan.

Metropolitan/Arizona Interim Surplus Guidelines Agreement — This May 23, 2001 agreement between the State of Arizona and Metropolitan was voided when the Quantification Settlement Agreement was not in full force and effect by December 31, 2002. Arizona and California have completed negotiations on a replacement agreement.

MAF (million acre-feet) — A unit measure of water.

Minute 319 — Agreement that amends the 1944 Treaty between Mexico and the United States by establishing new rules in sharing Colorado River water and provides immediate plans to address current challenges. Parties to the agreement include Metropolitan Water District of Southern California, Southern Nevada Water Authority, Central Arizona Water Conservation District. Minute 319 allows Mexico to store water in Lake Mead as Intentionally Created Mexican Apportionment for future delivery and environmental flows. Stored water will be exchanged among the parties to the agreement.

MWDOC — Municipal Water District of Orange County; one of 26 member agencies that comprise Metropolitan.

MOU (Memorandum of Understanding) — Legal agreements entered into between Metropolitan and any of the four employee bargaining units that dictate terms and conditions of employment.

Ocean Plan — California's Ocean Plan contains regulations for ocean brine discharges and intakes, and the State Water Resources Control Board is proposing to add new regulations specifically for seawater desalination projects.

Ocean Protection Council — The Ocean Protection Council develops a five-year Strategic Plan to guide future ocean resource policies for other state agencies and has developed new policy recommendations for seawater desalination development.

Operating Equipment — Any portable equipment costing \$5,000 or more and having a useful life of five years or more.

Operations Maintenance Power & Recovery (OMP&R) — A component of the State Water Contract that is billed to the contracting agencies to maintain the system.

OPEB — Other Post Employment Benefits.

ORP — Oxidation Retrofit Program.

Ozone — Is a faintly blue gas with a pungent odor. It is an unstable form of oxygen composed of three-atom molecules that break down readily to normal oxygen and nascent oxygen. The latter is a powerful oxidizing agent and has germicidal action. Ozone is usually produced with on-site generators by passing high-voltage electricity through dry atmospheric air or pure oxygen between stationary electrodes. This process converts a small percentage of the oxygen in the air into ozone. It is usually injected into the water to be treated in a highly baffled mixing chamber.

PAYGO — The practice of funding construction expenditures from current operating revenues in lieu of using debt proceeds.

PVID — Palo Verde Irrigation District.

Palo Verde Land Management and Water Supply Program — Calls for the development of a flexible water supply of between 25,000 and 111,000 acre-feet per year for 35 years through a land management and crop rotation program to be implemented by participating farmers in the Palo Verde Valley. The maximum water supply that could be developed would be about 3.63 million acre-feet during the 35-year term while the minimum water supply required to be developed would be 1.76 million acre-feet.

Performance Excellence — A long-term effort to implement best practices in day-to-day operations and maintenance activities, emphasizing continuous improvement in operations and maintenance practices.

Performance Measure — An indicator of progress toward completing an initiative, achieving a goal, or implementing a strategy. Performance measures are quantifiable and tracked over time. Measures can indicate problem areas that need attention or be a guide for continual performance improvement through specific initiatives and actions.

PCCP — Pre-stressed Concrete Cylinder Pipe.

PPCP — Pharmaceutical and personal care products.

Power Recovery — Energy generated from the operation of sixteen Metropolitan-owned hydroelectric generating facilities. The term "recovery" derives from the capture of potentially wasted electrical energy from Metropolitan's water distribution system.

Quagga Mussel — A destructive non-native species of mussel from the Ukraine region that could clog pipes and water line.

Quantification Settlement Agreement (QSA) — The Quantification Settlement Agreement (QSA), executed by Coachella Valley Water District (CVWD), Imperial Irrigation District (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. The QSA and related agreements provide a framework for Metropolitan to enter into other cooperative Colorado River supply programs and set aside several disputes among California's Colorado River water agencies.

Readiness-To-Serve (RTS) Charge — A charge designed to provide firm revenue for Capital Investment Plan (CIP) debt service to meet the reliability and quality needs of existing and potential users.

RPDM — Real Property Development and Management (group); an organization within Metropolitan that provides real property related services.

Regional Urban Water Management Plan — A document prepared in response to the California Urban Water Management Act, Water Code Sections 10610 through 10656, enacted in 1983. The Act requires that every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually prepare an adopt an urban water management plan that describes and evaluates reasonable, practical, and efficient water uses, recycling, conservation activities, and drought contingency planning. These plans must be updated every five years and filed with the California Department of Water Resources.

Replacement and Refurbishment (R&R) — Capital projects that invest in Metropolitan's aging infrastructure by restoring them to optimal operating status.

Reserves — Funds set aside to comply with bond covenants, working capital policy, or other board policies as part of a prudent financial strategy.

Reserve Transfer — Fund transfers required to maintain a given level of fund balances in accordance with Board policies and bond covenants.

Revenue Remainder Fund — See Financial Policies for description.

SCADA — Supervisory Control and Data Acquisition; automated systems that are used to monitor, operate, and control Metropolitan's water conveyance, treatment, and distribution systems.

SDCWA — San Diego County Water Authority; one of 26 member agencies that make up Metropolitan.

Senate Bill 60 — This bill requires Metropolitan to place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures and, commencing February 1, 2001, to prepare and submit to the Legislature a prescribed annual report relating to water conservation.

State Water Contract (SWC) —. State Water Contracts are the basis for all SWP construction and ongoing operations. As the largest of the now 29 contractors, Metropolitan is entitled to slightly less than half of all SWP supplies. Water supplies from the SWP are conveyed to Metropolitan via the SWP's 444-mile California Aqueduct, which was made possible pursuant to Metropolitan's State Water Contract.

State Water Project (SWP) — The SWP is the largest state-built, user-financed water supply and transportation project in the country. The SWP serves urban and agricultural agencies from the San Francisco Bay area to Southern California. Its facilities were constructed with several general types of financing, the repayment of which is made by the 29 agencies and districts that participate in the SWP through long-term contracts (the State Water Contractors). The State Water Contractors also pay for the operations, maintenance, power, and replacement costs of the SWP.

System Access Rate (SAR) — A volumetric rate that member agencies pay for use of Metropolitan's conveyance and distribution system.

System Overview Study — An analysis of Metropolitan's current delivery and treatment capacities versus projected needs during the planning horizon. The System Overview Study, coupled with the Integrated Area Study, analyzes various portfolios of projects that could be used to meet future demand and then develops a potential CIP. Finally, the System Overview Study analyzes the potential impact to rates from the proposed facilities.

System Power Rate (SPR) — A volumetric rate to recover the cost of pumping water through the Colorado River Aqueduct and the State Water Project.

TAF (thousand acre-feet) — A unit of measure of water.

Tier 1 Supply Rate — A rate applied to recover the cost of maintaining reliable water supplies.

Tier 2 Supply Rate — A rate that reflects the cost of north of the Delta transfers. The Tier 2 Rate is intended to encourage cost-effective water conservation, recycling, groundwater recovery as well as water transfers.

Total Dissolved Solids (TDS) — Refers to the total organic carbon concentration in water. Measurement of TOC removal is used as a surrogate for disinfection by-product precursor removal.

Treatment Plants — Facilities used by Metropolitan for the treatment of water to remove contaminants or total dissolved solids thus ensuring that such water is potable before it is distributed to member agencies.

Treatment Surcharge — Charge to users of treated water to pay the operations, maintenance and capital costs of treating imported water supplies.

U.S. Department of the Interior, Bureau of Reclamation (USBR) — Largest wholesaler of water and second largest supplier of hydroelectric power in the American West. Promotes water conservation, recycling, and reuse.

Vacancy Factor — A calculated reduction to the O&M labor budget that attempts to account for vacancies that occur within organizations throughout the year. Budgeted labor dollars assume that budgeted positions will be filled for the entire fiscal year (2,080 hours). However, positions routinely become vacant throughout Metropolitan for part of the year as staff transfer to other positions or leave employment in the company and time elapses during the recruitment period to refill the vacated positions.

WRSF — Water Rate Stabilization Fund. See Financial Policies for description.

WRM — Water Resource Management (group); an organization within Metropolitan that focuses on water resource planning and management, including conservation.

WSF — Water Stewardship Fund. See Financial Policies for description.

Water Stewardship Rate (WSR) — A volumetric rate to recover the cost of demand management programs including the Conservation Credits Program (CCP) and the Local Resources Program (LRP).

Water Supply Allocation Plan (WSAP) — This plan is intended to be implemented during periods of regional water shortages to promote conservation of scarce water supplies. The WSAP was created to approach limiting supplies in a manner that is regionally fair and minimizes impacts by establishing accurate and fair baselines for each of Metropolitan's twenty-six member agencies.

Water Supply Programs — Water transfer and storage programs that supplement Colorado River and State Water Project supplies.

Water Surplus Drought Management Plan (WSDM Plan) — This plan directs Metropolitan's resource operations to help attain the region's reliability goal. The WSDM Plan recognizes the interdependence of surplus and shortage actions and is a coordinated plan that utilizes all available resources to maximize supply reliability. The overall objective is to ensure that shortage allocation of Metropolitan's imported water supplies is minimized.

Working Capital — A measure of both a company's efficiency and its short-term financial health. The working capital ratio is calculated as:

Working Capital = Current Assets - Current Liabilities.

WSO — Water System Operations (group); an organization within Metropolitan responsible for operating and maintaining Metropolitan's water conveyance, treatment, and distribution system and its appurtenant systems.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

RESOLUTION 9203

RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
FIXING AND ADOPTING WATER RATES
TO BE EFFECTIVE JANUARY 1, 2017 AND 2018

WHEREAS, the Board of Directors ("Board") of The Metropolitan Water District of Southern California ("Metropolitan"), pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the "Act"), is authorized to fix such rate or rates for water that, so far as practicable, will result in revenue which, together with revenue from any water standby or availability service charge or assessment, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt; and

WHEREAS, on October 16, 2001, the Board approved a rate structure proposal described in Board Letter 9-6 dated October 16, 2001.

WHEREAS, on March 12, 2002, the Board adopted Resolution 8805, "Resolution Of The Board Of Directors Of The Metropolitan Water District Of Southern California Fixing And Adopting Rates And Charges For Fiscal Year 2002/03 And To Direct Further Actions In Connection Therewith", adopting a new structure for Metropolitan's water rates and charges in order to enhance Metropolitan's fiscal stability and ability to ensure the region's long-term water supply while reasonably and fairly allocating the cost of providing service to its member agencies; and

WHEREAS, the rate structure adopted by Resolution 8805 was the product of a three-year process that included a strategic planning process commenced by the Board in July 1998, discussions with member agencies, retail agencies and other stakeholders and numerous meetings of Metropolitan's Board, Audit, Budget and Finance Committee, Budget, Finance and Investment Committee and Subcommittee on Rate Structure Implementation; and

WHEREAS, development of the rate structure adopted by Resolution 8805 included Strategic Plan Policy Principles adopted by the Board on December 14, 1999 to provide a framework for the development of a revised rate structure; a Composite Rate Structure Framework adopted by the Board on April 11, 2000 (the "Rate Structure Framework"); a Rate Structure Action Plan adopted by the Board on December 12, 2000; and study of (i) a detailed rate design proposal presented in December 2000 (the "December 2000 Proposal") developed

from the Rate Structure Framework and (ii) an alternative rate structure proposal presented in September 2001 (the "Proposal") that addressed concerns which were raised about the December 2000 Proposal; and

WHEREAS, by Resolution 8774, "Resolution Of The Board Of Directors Of The Metropolitan Water District Of Southern California To Approve Rate Structure Proposal And To Direct Further Actions In Connection Therewith," adopted October 16, 2001, the Board approved the Proposal, which unbundled water rates and charges to reflect the different service functions provided by Metropolitan, and determined that the Proposal (i) was consistent with the Board's Strategic Plan Policy Principles, (ii) addressed issues raised during the consideration of the December 2000 Proposal, (iii) furthered Metropolitan's strategic objectives of ensuring the region's long term water supply reliability through encouragement of sound and efficient water resources management, water conservation, and accommodating a water transfer market, and (iv) enhanced the fiscal stability of Metropolitan; and

WHEREAS, by Resolution 8774, the Board directed the General Manager to (i) prepare a report on the Proposal describing each of the rates and charges and the cost of service process used to develop the rates and charges and (ii) utilize the Proposal as the basis for determining Metropolitan's revenue requirements and recommending rates to become effective January 1, 2003, in accordance with Metropolitan's annual rate-setting procedure under the Administrative Code; and

WHEREAS, on January 7, 2002, the General Manager presented to the Budget, Finance and Investment Committee (formerly the Audit, Budget and Finance Committee and today, the Finance and Insurance Committee) a detailed report describing each of the rates and charges and the supporting cost of service process, dated December 2001 (the "Cost of Service Report"), that (i) described the rate structure process and design; (ii) identified revenue requirements; (iii) showed the costs of major service functions that Metropolitan provides to its member agencies, (iv) classified these service function costs based on the use of and benefit from the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges; and (iv) set forth the rates and charges necessary to defray such costs; and

WHEREAS, by Resolution 8805 the Board found and determined that the cost of service process reasonably and fairly: (i) identified revenue requirements; (ii) allocated costs to the service functions that Metropolitan provides to its member agencies; (iii) classified service function costs based upon use of and benefit from Metropolitan's system, and (iv) allocated costs to rates and charges based upon customary water industry standards; and

WHEREAS, by Resolution 8805 the Board found and determined that the water rates and charges were supported by the cost of service process and that such rates and charges reasonably and fairly allocated the costs of providing service of Metropolitan's water system to its member agencies and third-party transporters of water, if any; and

WHEREAS, the Board received the Final Report on Rates and Charges, dated June 28, 2002, that (i) described the rate structure process and design; (ii) identified revenue requirements; (iii) showed the costs of major service functions that Metropolitan provides to its member agencies, (iv) classified these service function costs based on the use of and benefit of

the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges; and (iv) set forth the rates and charges necessary to defray such costs; and

WHEREAS, Metropolitan's water rates approved by the Board thereafter (on March 11, 2003, March 9, 2004, March 8, 2005, March 14, 2006, April 10, 2007, March 11, 2008, April 14, 2009, April 13, 2010, April 10, 2012, and April 8, 2014) have utilized the unbundled water rate elements in the rate structure approved by Resolution 8774 and implemented by Resolution 8805; and

WHEREAS, the cost of service process supporting Metropolitan's water rates approved by the Board on March 11, 2003 and in following years is consistent with the cost of service process described in the Cost of Service Report. Raftelis Financial Consultants, Inc. ("RFC"), the firm engaged in 1998 to perform a comprehensive cost of service study and assist in the development of the rate structure, confirmed to the Board in a report dated April 6, 2010, that the fiscal year 2010/11 cost of service report presented to the Board in January 2010 was accurate and consistent with the Cost of Service Report and that the fiscal year 2010/11 cost of service report and rate methodology was consistent with water industry best practices and complies with cost of service and rate guidelines in the American Water Work's Association's Manual M-1, *Principles of Water Rates, Fees and Charges*; and

WHEREAS, in San Diego County Water Authority v. Metropolitan Water District of Southern California, et al., San Francisco Superior Court Case Nos. CPF-10-510830 and CPF-12-512466 (the "2010 and 2012 Cases," collectively), the San Diego County Water Authority challenged Metropolitan's water rates adopted on April 13, 2010 and April 10, 2012, and Metropolitan is defending such challenges; and

WHEREAS, Metropolitan maintains that its rate structure and such rates are appropriate. The trial court entered a judgment on November 18, 2015 in both cases, which Metropolitan is currently appealing in *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, First District, California Court of Appeal, Case No. A146901. Metropolitan does not anticipate a final decision by the Court of Appeal in the near term; and

WHEREAS, San Diego County Water Authority filed a lawsuit also challenging Metropolitan's water rates adopted on April 8, 2014, also titled *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, San Francisco Superior Court Case No. CPF-14-514004, and the Court has ordered the case stayed pending the appeal of the 2010 and 2012 Cases; and

WHEREAS, on January 28, 2016, the General Manager and Chief Financial Officer provided to the Board and the public a board letter describing the proposed biennial budget for fiscal years 2016/17 and 2017/18, identifying key assumptions, addressing key circumstances such as current state water supply conditions, use of projected water rate stabilization reserves over the reserve target and continued suspension of the ad valorem rate restrictions under Section 124.5 of the MWD Act to allow Metropolitan to maintain the current ad valorem tax rate, incorporating a ten-year financial forecast, determining anticipated total revenues and revenues anticipated to be derived from water sales and firm revenue sources required during fiscal years

2016/17 and 2017/18, identifying revenue requirements for that period and recommending rates and charges consistent with cost of service principles to be effective January 1, 2017 and January 1, 2018, and explaining that costs and revenues may be at variance with forecasts and variations will be addressed, for example by contributions to, or withdraws from, financial reserves maintained for this purpose; and

WHEREAS, the recommended rates were developed using the same unbundled water rate elements in the rate structure approved by Resolution 8774 and implemented by Resolution 8805; and

WHEREAS, the January 28, 2016, board letter included a summary of the proposed biennial budget for fiscal years 2016/17 and 2017/18, a ten-year financial forecast, estimated revenue requirements for fiscal years 2016/17 and 2017/18 to support the proposed biennial budget, and provided estimated rates and charges, developed using Metropolitan's existing cost of service methodology, and set forth the estimated rates and charges necessary to defray such costs; and

WHEREAS, the detailed proposed departmental biennial budget for fiscal years 2016/17 and 2017/18 was distributed to the Board and the public on January 28, 2016; and

WHEREAS, on February 5, 2016, the capital investment plan appendix to the detailed proposed departmental biennial budget for fiscal years 2016/17 and 2017/18 was provided to the Board and the public, providing detailed information on proposed capital projects and capital improvement costs; and

WHEREAS, on February 8, 2016, the Chief Financial Officer presented to the Finance and Insurance Committee of Metropolitan's Board the proposed biennial budget for fiscal years 2016/17 and 2017/18, ten-year financial forecast, determination of anticipated total revenues and of revenues anticipated to be derived from water sales and firm revenue sources required during fiscal years 2016/17 and 2017/18, and his recommended rates to be effective January 1, 2017 and January 1, 2018, and charges for fiscal years 2016/17 and 2017/18; and

WHEREAS, Board workshops and discussions regarding the proposed budget and future water rates and charges were held on February 8, 2016 and March 7, 2016 at the regularly scheduled Finance and Insurance Committee meetings, and on February 23, 2016 and March 22, 2016 at the Finance and Insurance Committee; and

WHEREAS, on February 23, 2016, the Chief Financial Officer presented to the Finance and Insurance Committee further detail regarding the estimated revenue requirements in the proposed biennial budget, provided an overview of Metropolitan's existing rate structure and the process of determining rate components under Metropolitan's existing rate structure, and addressed questions previously raised by the Board. A presentation was also made to the Committee by Raftelis Financial Consultants, Inc., an independent financial and rate consultant, presenting alternatives to the current 100% volumetric Treatment Surcharge, consisting of a partial fixed charge; and

WHEREAS, on March 7, 2016, the Chief Financial Officer proposed water rates and charges, consistent with the estimated rates and charges recommended on January 28, 2016, and made a presentation addressing further questions from the Board. Raftelis also made a presentation to the Committee addressing questions raised by the Board regarding the partial fixed charge alternatives to the 100% volumetric Treatment Surcharge; and

WHEREAS, on March 22, 2016, the Chief Financial Officer presented to the Finance and Insurance Committee a summary of the proposed Capital Investment Plan budget, updated on March 16, 2016, an overview of the cost of service report provided to the Board on March 16, 2016, and addressed additional questions raised by the Board. Raftelis also provided a presentation to the Committee summarizing the options for the partial fixed charge alternatives to the 100% volumetric Treatment Surcharge; and

WHEREAS, the Board conducted a public hearing at its regular meeting on March 8, 2016, at which interested parties were given the opportunity to present their views regarding the proposed water rates and charges; and

WHEREAS, notice of the public hearing was published prior to the hearing in various newspapers of general circulation within Metropolitan's service area; and

WHEREAS, Metropolitan received oral and written comments regarding the proposed water rates and charges, which have been provided to the Board and made available to the public; and

WHEREAS, on March 16, 2016 the Chief Financial Officer provided to the Board and the public the cost of service report for the proposed rates and charges to be effective January 1, 2017 and January 1, 2018, which (i) describes the rate structure process and design, (ii) identifies revenue requirements; (iii) shows the costs of major service functions that Metropolitan provides to its member agencies, (iv) allocates these service function costs based on the use of and benefit from the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges, and (v) sets forth the specific rates and charges necessary to defray such costs; and on March 30, 2016 the Chief Financial Officer provided to the Board and the public an updated cost of service report with minor revisions; and

WHEREAS, on March 30, 2016, the General Manager and Chief Financial Officer provided to the Board and the public a board letter describing the recommendations for the biennial budget for fiscal years 2016/17 and 2017/18; determination of total revenues and of revenues to be derived from water sales and firm revenue sources required during fiscal years 2016/17 and 2017/18, and recommended rates to be effective January 1, 2017 and January 1, 2018, and charges to be imposed in fiscal years 2016/17 and 2017/18; and

WHEREAS, the March 30, 2016 board letter also described two proposed options for a fixed charge alternative to the 100 percent volumetric Treatment Surcharge to recover treated water costs to be effective January 1, 2017 and January 1, 2018; and

WHEREAS, the March 30, 2016 board letter included the biennial budget summary, tenyear financial forecast and detailed cost of service report on the rates and charges; and

WHEREAS, on April 11, 2016, the Chief Financial Officer presented to the Finance and Insurance Committee of Metropolitan's Board the proposed biennial budget for fiscal years 2016/17 and 2017/18 and ten-year financial forecast, determination of total revenues and of revenues to be derived from water sales and firm revenue sources required during fiscal years 2016/17 and 2017/18, and the recommended rates to be effective January 1, 2017 and January 1, 2018, and charges to be imposed in fiscal years 2016/17 and 2017/18, explaining that actual revenues and expenses may vary from budgeted amounts for a variety of reasons, and that Administrative Code Section 5202(e) contemplates variation in actuals to budget and provides policy guidance to the Board, and that Metropolitan's financial obligations may include liabilities and future commitments, such as retiree obligations and debt service, that are not reflected in the budget but that can be addressed in a fiscally prudent manner to reduce future obligations and keep future rate increases reasonable within the policy guidance provided by Administrative Code Section 5202(e); and

WHEREAS, each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout; and

WHEREAS, all board letters, reports, presentations and other documents referred to in this Resolution may be viewed by Board members and the public on Metropolitan's web page at http://www.mwdh2o.com or in the office of the Board Executive Secretary;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California does hereby resolve, determine and order as follows:

Section 1. That the Board of Directors of The Metropolitan Water District of Southern California hereby fixes and adopts Option #__ of the following options for water rates and charges, to be effective on January 1, 2017 and January 1, 2018 as shown in the table below, in order to enhance Metropolitan's fiscal stability and ability to ensure the region's long-term water supply while reasonably and fairly allocating the cost of providing service to its member agencies and other users of Metropolitan's system:

Table 1. Rates and Charges by Option

		Option #1a		Option #1b		Option #2	
Rates and Charges Effective January 1st	2016	2017	2018	2017	2018	2017	2018
Tier 1 Supply Rates (\$/AF)	\$156	\$201	\$209	\$201	\$209	\$201	\$209
Tier 2 Supply Rate (\$/AF)	\$290	\$295	\$295	\$295	\$295	\$295	\$295
System Access Rate (\$/AF)	\$259	\$289	\$299	\$289	\$299	\$289	\$299
Water Stewardship Rate (\$/AF)	\$41	\$52	\$55	\$52	\$55	\$52	\$55
System Power Rate (\$/AF)	\$138	\$124	\$132	\$124	\$132	\$124	\$132
Full Service Untreated Volumetric Cost (\$/AF)							
Tier 1	\$594	\$666	\$695	\$666	\$695	\$666	\$695
Tier 2	\$728	\$760	\$781	\$760	\$781	\$760	\$781
Treatment Surcharge (\$/AF)	\$348	\$195	\$197	\$195	\$197	\$313	\$320
Full Service Treated Volumetric Cost (\$/AF)							
Tier 1	\$942	\$861	\$892	\$861	\$892	\$979	\$1,015
Tier 2	\$1,076	\$955	\$978	\$955	\$978	\$1,073	\$1,101
Readiness-to-Serve Charge (\$M)	\$153	\$135	\$140	\$135	\$140	\$135	\$140
Capacity Charge (\$/cfs)	\$10,900	\$8,000	\$8,700	\$8,000	\$8,700	\$8,000	\$8,700
Treated Water Fixed Charge (\$M)		\$98	\$102	\$98	\$102		

Section 2. The Board finds and determines that the rates specified in Section 1 utilize the unbundled water rate and charge elements of the rate structure approved by Resolution 8774 and implemented by Resolution 8805, and that the cost of service process supporting the rates and charges specified in Section 1 is the cost of service process described in the FY 2016/17 and 2017/18 cost of service report.

Section 3. The Board finds and determines that the cost of service process reasonably, fairly and proportionately: (i) identifies revenue requirements; (iii) shows the costs of major service functions that Metropolitan provides to its member agencies, (iii) assigns costs to the service functions that Metropolitan provides to its member agencies and other users of Metropolitan's system; (iv) allocates service function costs based upon use of and benefit from Metropolitan's system, and (v) distributes costs to rates and charges based upon customary water industry standards. Accordingly, the Board finds that the cost of service process supports the rates and charges by creating a logical nexus between the costs and the revenues required and the rates and charges necessary to defray Metropolitan's costs of providing its services and for use of its water system.

Section 4. The Board finds and determines that the rates specified in Section 1 are fixed by the Board pursuant to Sections 133 and 134 of the Act, and, so far as practicable, will result in revenue which, together with revenue from water standby or availability service charges or assessments, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt. Actual revenues and expenses may vary from budgeted amounts for a variety of reasons, and Administrative Code Section 5202(e) contemplates variation in actuals

to budget and provides policy guidance to the Board, and the Board finds and determines that Metropolitan's financial obligations may include liabilities and future commitments, such as retiree obligations and debt service, that are not reflected in the budget but that can be addressed in a fiscally prudent manner to reduce future obligations and keep future rate increases reasonable within the policy guidance provided by Administrative Code Section 5202(e).

- **Section 5.** The Board finds and determines that each of the rates specified in Section 1 does not exceed the reasonable and necessary cost of providing the product or service for which the rate is charged and that the per-acre-foot rates fairly apportion such costs among member agencies and other users of Metropolitan's system according to their burden on or benefit from Metropolitan's water system.
- **Section 6.** The Board finds and determines that the respective per-acre-foot rates specified in Section 1 are paid for the corresponding products or services and use of its water system, that Metropolitan provides such products or services directly to the member agencies or other users of Metropolitan's system that pay such rates, and that such products or services are not provided to those not charged.
- **Section 7.** The Board finds and determines that each of the rates specified in Section 1 is imposed for the purpose of paying said cost of service and is not levied for general revenue purposes.
- **Section 8.** The General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.
- **Section 9.** This Board finds that approval of the rates and charges as provided in this Resolution is not defined as a Project under the California Environmental Quality Act (CEQA), because they involve continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed actions are not subject to CEQA because they involve the creation of government funding mechanisms or other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).
- **Section 10.** If any provision of this is held invalid, that invalidity shall not affect other provisions of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 12, 2016.

Secretary of the Board of Directors of The Metropolitan Water District of Southern California

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

RESOLUTION 9204

RESOLUTION OF THE BOARD OF DIRECTORS OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA FIXING AND ADOPTING A READINESS-TO-SERVE CHARGE EFFECTIVE JANUARY 1, 2017

WHEREAS, at its meeting on October 16, 2001, the Board of Directors ("Board") of The Metropolitan Water District of Southern California ("Metropolitan") approved a rate structure proposal described in Board Letter 9-6 dated October 16, 2001, including a Readiness-To-Serve ("RTS") Charge; and

WHEREAS, providing firm revenue sources is a goal of such rate structure; and

WHEREAS, the amount of revenue to be raised by the RTS Charge shall be as determined by the Board and allocation of the RTS Charge among member public agencies shall be in accordance with the method established by the Board; and

WHEREAS, the RTS Charge is a charge fixed and adopted by Metropolitan and charged to its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and

WHEREAS, Metropolitan has legal authority to fix and adopt such RTS Charge as a water rate pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the "Act"), and to fix it as an availability of service charge pursuant to Section 134.5 of the Act; and

WHEREAS, under authority of Sections 133 and 134 of the Act, the Board has the authority to fix the rate or rates for water as will result in revenue which, together with other revenues, will pay Metropolitan's operating expenses and provide for payment of other costs, including payment of the interest and principal of Metropolitan's non-tax funded bonded debt; and

WHEREAS, pursuant to Resolution 8329, adopted by the Board on July 9, 1991, as amended and supplemented, proceeds of the RTS Charge and other revenues from the sale or availability of water are pledged to the payment of Metropolitan's outstanding revenue bonds and revenue bonds to be issued pursuant to Resolution 8329; and

WHEREAS, under authority of Section 134.5 of the Act, a RTS Charge levied as an availability of service charge may be collected from the member public agencies within Metropolitan, or may continue to be collected as a standby charge against individual parcels within Metropolitan's service area; and

WHEREAS, certain member public agencies of Metropolitan have opted in prior fiscal years to provide collection of all or a portion of their RTS Charge obligation through a Metropolitan water standby charge ("Standby Charge") levied on parcels within those member agencies; and

WHEREAS, under authority of Section 134.5 of the Act, the Standby Charge may continue to be levied on each acre of land or each parcel of land less than an acre within Metropolitan to which water is made available for any purpose by Metropolitan, whether the water is actually used or not; and

WHEREAS, Metropolitan is willing to comply with the requests of member public agencies opting to have Metropolitan continue to levy the Standby Charge within their respective territories, on the terms and subject to the conditions contained herein; and

WHEREAS, on February 8, 2016, the General Manager presented to the Finance and Insurance Committee of Metropolitan's Board his proposed biennial budget for fiscal years 2016/17 and 2017/18, determination of total revenues and of revenues to be derived from water sales and firm revenue sources required during the fiscal years 2016/17 and 2017/18; and

WHEREAS, Board workshops and discussions regarding the proposed biennial budget for fiscal years 2016/17 and 2017/18 and water rates and charges for 2017 and 2018 were held on February 8, 2016 and March 7, 2016 at the regularly scheduled Finance and Insurance Committee meetings, and on February 23, 2016 and March 22, 2016 at the Finance and Insurance Committee; and

WHEREAS, the Board conducted a public hearing on its proposed rates and charges for 2017 and 2018 at its regular meeting on March 8, 2016, at which interested parties were given the opportunity to present their views regarding the proposed rates and charges; and

WHEREAS, notice of the public hearing on the proposed rates and charges was published prior to the hearing in various newspapers of general circulation within Metropolitan's service area; and

WHEREAS, written notice of intention of Metropolitan's Board to consider and take action at its regular meeting to be held April 12, 2016, to adopt Metropolitan's RTS Charge for calendar year 2017 was given to each of Metropolitan's member public agencies; and

WHEREAS, based on the feedback received from board workshops held on February 8, 2016, February 23, 2016, March 7, 2016, and March 22, 2016, and at the public hearing on March 8, 2016, the General Manager proposed rates and charges on April 12, 2016; and

WHEREAS, the supporting cost of service report was provided to the Board on March 16, 2016, was discussed with the Board on March 22, 2016, and an updated cost of service report with minor revisions was provided to the Board on March 30, 2016; and

WHEREAS, on April 12, 2016, the Board considered the rates and charges presented by the General Manager and approved the biennial budget for fiscal years 2016/17 and 2017/18 and adopted recommended water rates and charges for 2017 and 2018; and

WHEREAS, in adopting the rates and charges on April 12, 2016, the Board determined the amount of revenue to be raised by the RTS Charge in 2017 to be \$135,000,000; and

WHEREAS, the RTS Charge applicable to each member public agency, the method of its calculation, and the specific data used in its determination are as specified in the Engineer's Report dated April 2016 (the "Engineer's Report"); and

WHEREAS, the Engineer's Report reflects costs provided in the cost of service report; and

WHEREAS, each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California does hereby resolve, determine and order as follows:

Section 1. That the Board of Directors of Metropolitan hereby fixes and adopts an RTS Charge for the period from January 1, 2017 through December 31, 2017.

Section 2. That said RTS Charge shall be in an amount sufficient to provide for payment of debt service and other appropriately allocated costs, for capital expenditures for infrastructure projects needed to provide emergency service and available capacity needs.

Section 3. That such RTS Charge for January 1, 2017 through and including December 31, 2017 shall be based on the water rate as specified in Section 5 for the rate option selected by the Board, which shall be charged on a historic basis for each acre-foot of water, excluding water used for purposes of replenishing local storage and agriculture as defined by the Administrative Code, included in Metropolitan's average water deliveries to its member agencies for the applicable ten-year period identified in Section 6 below. The aggregate RTS Charge for the period from January 1, 2017 through and including December 31, 2017 shall be as specified in Section 6.

Section 4. That the RTS Charge specified in Table 1 does not exceed the reasonable and necessary cost of providing the service for which the charge, or conferring the benefit provided, is made and is fairly apportioned to each member agency as specified in Section 6 below. Accordingly, the Board finds and determines that the RTS Charge is a reasonable fee charged according to the burden on or benefit from the use of emergency service and available capacity.

Section 5. That in the alternative, and without duplication, the RTS Charge shall be an availability of service charge pursuant to Section 134.5 of the Act.

Section 6. That the RTS Charge for January 1, 2017 through December 31, 2017 shall be allocated among the member public agencies in proportion to the average of deliveries through Metropolitan's system (in acre-feet) to each member public agency during the ten-year period ending June 30, 2015. Metropolitan sales of reclaimed water under the Local Projects Program, groundwater under the Groundwater Recovery Program, and deliveries under the Replenishment and Interim Agricultural Water Service Programs are not included in the RTS Charge water sales calculation. The allocation of the RTS Charge among member agencies is based on sales data recorded by Metropolitan and shall be conclusive in the absence of manifest error.

The amount of the RTS Charge to be charged to each member public agency effective January 1, 2017, is as follows:

Table 1
Calendar Year 2017 Readiness-To-Serve Charge

Water rate \$78.74/acre-foot				
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2005/06 - FY2014/15	RTS Share	12 months @ \$135 million per year (1/17-12/17)	
Anaheim	20,890	1.22%	\$ 1,644,773	
Beverly Hills	11,386	0.66%	896,470	
Burbank	12,817	0.75%	1,009,197	
Calleguas MWD	109,124	6.36%	8,592,062	
Central Basin MWD	51,539	3.01%	4,058,007	
Compton	1,924	0.11%	151,513	
Eastern MWD	98,628	5.75%	7,765,612	
Foothill MWD	9,790	0.57%	770,791	
Fullerton	9,668	0.56%	761,240	
Glendale	19,594	1.14%	1,542,739	
Inland Empire Utilities Agency	60,811	3.55%	4,788,020	
Las Virgenes MWD	22,750	1.33%	1,791,215	
Long Beach	34,316	2.00%	2,701,881	
Los Angeles	312,096	18.20%	24,573,320	
Municipal Water District of Orange County	221,545	12.92%	17,443,662	
Pasadena	21,181	1.24%	1,667,686	
San Diego County Water Authority	367,123	21.41%	28,905,959	
San Fernando	82	0.00%	6,480	
San Marino	931	0.05%	73,288	
Santa Ana	12,605	0.74%	992,442	
Santa Monica	9,252	0.54%	728,501	
Three Valleys MWD	65,261	3.81%	5,138,444	
Torrance	18,130	1.06%	1,427,500	
Upper San Gabriel Valley MWD	22,143	1.29%	1,743,477	
West Basin MWD	125,379	7.31%	9,871,876	
Western MWD	75,617	4.41%	5,953,847	
MWD Total	1,714,580	100.00%	\$ 135,000,000	
Totals may not foot due to rounding				

- **Section 7.** That the allocation of the RTS Charge among member agencies set forth in Section 6 above is consistent with the per-acre-foot water rates fixed and adopted as set forth in Section 6 above.
- **Section 8.** That water conveyed through Metropolitan's system for the purposes of water transfers, exchanges or other similar arrangements shall be included in the calculation of a member agency's rolling ten-year average firm demands used to allocate the RTS Charge.
- **Section 9.** That the RTS Charge and the amount applicable to each member public agency, the method of its calculation, and the specific data used in its determination are as specified in the adopted option based on the General Manager's three alternative options on rates and charges to be effective January 1, 2017, which forms the basis of the RTS Charge, and the corresponding cost of service report. The adopted option on rates and charges and cost of service reports are on file and available for review by interested parties at Metropolitan's headquarters.
- **Section 10.** That except as provided in Section 12 below with respect to any RTS Charge collected by means of the Standby Charge, the RTS Charge shall be due monthly, quarterly or semiannually as agreed upon by Metropolitan and the member agency.
- **Section 11.** That such RTS Charge may, at the request of any member agency which elected to utilize the Standby Charge as a mechanism for collecting the RTS Charge obligation in FY 1996/97, be collected by continuing the Standby Charge at the same rates levied in FY 1996/97 upon land within Metropolitan's (and such member public agency's) service area to which water is made available by Metropolitan for any purpose, whether such water is used or not.
- Section 12. That the Standby Charge shall be collected on the tax rolls, together with the *ad valorem* property taxes which are levied by Metropolitan for the payment of pre-1978 voter-approved indebtedness. Any amounts so collected shall be applied as a credit against the applicable member agency's RTS Charge obligation. After such member agency's RTS Charge allocation is fully satisfied, any additional collections shall be credited to other outstanding obligations of such member agency to Metropolitan or future RTS Charge obligations of such agency or, if crediting against other outstanding obligations of a member agency to Metropolitan proves to be impracticable, may be transmitted to the member agency for application solely to the cost of capital infrastructure projects of benefit to properties within the member agency. Notwithstanding the provisions of Section 10 above, any member agency requesting to have all or a portion of its RTS Charge obligation collected through Standby Charge levies within its territory as provided herein shall pay any portion not collected through net Standby Charge collections to Metropolitan within 50 days after Metropolitan issues an invoice for remaining RTS Charge obligations for such member agency, as provided in Administrative Code Section 4507.
- **Section 13.** That notice is hereby given to the public and to each member public agency of The Metropolitan Water District of Southern California of the intention of Metropolitan's Board to consider and take action at its regular meeting to be held May 10, 2016 (or such other date as the Board shall hold its regular meeting in such month), on the General Manager's recommendation to continue the Standby Charge for FY 2016/17 under authority of Section 134.5 of the Act on land within Metropolitan at the same rates, per acre of land, or per parcel of land less than an acre, levied in FY 1996/97 upon land within Metropolitan's (and such member public agency's) service area. Such Standby Charge will be continued as a means of collecting the RTS Charge.
- **Section 14.** That no failure to collect, and no delay in collecting, any Standby Charge shall excuse or delay payment of any portion of the RTS Charge when due. All amounts collected as water standby charges shall be applied solely as credits to the RTS Charge of the applicable member agency, with any excess

collections being carried forward and credited against other outstanding obligations of such member agency to Metropolitan.

Section 15. That the RTS Charge is fixed and adopted by Metropolitan as a rate or charge on its member agencies, and is not a fee or charge imposed upon real property or upon persons as incidents of property ownership, and the Standby Charge is collected within the respective territories of electing member agencies as a mechanism for collection of the RTS Charge. In the event that the Standby Charge, or any portion thereof, is determined to be an unauthorized or invalid fee, charge or assessment by a final judgment in any proceeding at law or in equity, which judgment is not subject to appeal, or if the collection of the Standby Charge shall be permanently enjoined and appeals of such injunction have been declined or exhausted, or if Metropolitan shall determine to rescind or revoke the Standby Charge, then no further Standby Charge shall be collected within any member agency and each member agency which has requested continuation of the Standby Charge as a means of collecting its RTS Charge obligation shall pay such RTS Charge obligation in full, as if continuation of such Standby Charge had never been sought.

Section 16. That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

Section 17 That this Board finds that the RTS Charge and other charges provided in this Resolution are not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

Section 18. That if any provision of this Resolution or the application to any member agency, property or person whatsoever is held invalid, that invalidity shall not affect other provisions or applications of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

Section 19. That the General Manager is hereby authorized and directed to take all necessary action to satisfy relevant statutes requiring notice by mailing or by publication.

Section 20. That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member public agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 12, 2016.

Secretary of the Board of Directors of The Metropolitan Water District of Southern California

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA ENGINEER'S REPORT

PROGRAM TO LEVY READINESS-TO-SERVE CHARGE,

INCLUDING LOCAL OPTION FOR STANDBY CHARGE, DURING FISCAL YEAR 2016/17

April 2016

BACKGROUND

The Metropolitan Water District of Southern California is a public agency with a primary purpose to provide imported water supply for domestic and municipal uses at wholesale rates to its member public agencies. More than 18 million people reside within Metropolitan's service area, which covers over 5,000 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. Metropolitan currently provides over 50 percent of the water used within its service area.

REPORT PURPOSES

As part of its role as an imported water supplier, Metropolitan builds capital facilities and implements water management programs that ensure reliable high quality water supplies throughout its service area. The purpose of this report is to: (1) identify and describe those facilities and programs that will be financed in part by Metropolitan's Readiness-to-Serve (RTS) Charge, and (2) describe the method and basis for levying Metropolitan's Standby Charge for those agencies electing to collect a portion of their RTS obligation through Metropolitan's Standby Charge in fiscal year 2016/17. **Because the Standby Charge is levied and collected on a fiscal year basis the calculations in this report also are for the fiscal year, even though the RTS Charge is levied on a calendar year basis.** The RTS Charge for calendar year 2016 was adopted by Metropolitan's Board on April 14, 2015 and the RTS Charge for 2017 will be considered by the Board on April 12, 2016.

Metropolitan levies the RTS Charge on its member agencies to recover a portion of the debt service on bonds issued to finance capital facilities needed to meet existing demands on Metropolitan's system. The Standby Charge is levied on parcels of land within certain of Metropolitan's member agencies as a method of collecting part or all of such member agency's RTS Charge obligation. The RTS Charge will partially pay for the facilities and programs described in this report. The Standby Charge, if levied, will be utilized solely for capital payments and debt service on the capital facilities identified in this report.

METROPOLITAN'S RESPONSE TO FLUCTUATING WATER DEMANDS

To respond to fluctuating demands for water, Metropolitan and its member agencies collectively examined the available local and imported resource options in order to develop a cost-effective plan that meets the reliability and quality needs of the region. The product of this intensive effort was an Integrated Resources Plan (IRP) for achieving a reliable and affordable water supply for Southern California. The major objective of the IRP was to develop a comprehensive water resources plan that ensures (1) reliability, (2) affordability, (3) water quality, (4) diversity of supply, and (5) adaptability for the region, while recognizing the environmental, institutional, and political constraints to resource development. As these constraints change over time, the IRP is periodically revisited and updated by Metropolitan and the member agencies to reflect current conditions. To meet the water supply needs of existing and future customers within its service area, Metropolitan continues to identify and develop additional water supplies to maintain the reliability of the imported water supply and delivery system. These efforts include the construction of capital facilities and implementation of demand management programs.

Capital Facilities

The capital facilities include the State Water Project (SWP), the Colorado River Aqueduct (CRA), storage facilities including Diamond Valley Lake (DVL), and additional conveyance and distribution system components. The benefits of these capital facilities are both local and system-wide, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area.

State Water Project Benefits

In 1960, Metropolitan contracted with the California Department of Water Resources (DWR) to receive SWP supplies. Under this contract, Metropolitan is obligated to pay its portion of the construction and operation and maintenance costs of the SWP system through at least the year 2035, regardless of the quantities of project water Metropolitan takes. Metropolitan is entitled to 1.9 million acre-feet of the total SWP contract amounts of 4.2 million acre-feet. All Metropolitan member agencies benefit from the SWP supplies, which are distributed to existing customers and are available to future customers throughout Metropolitan's service area. The potential benefit of the SWP allocable to the RTS Charge in fiscal year 2016/17 is shown in Table 1.

System Storage Benefits

The Metropolitan system, for purposes of meeting demands during times of shortage, regulating system flows, and to ensure system reliability in the event of a system outage, provides over 1,000,000 acre-feet of system storage capacity. DVL provides 800,000 acre-feet of storage capacity for water from the Colorado River Aqueduct and SWP, effectively doubling Southern California's previous surface water storage capacity. Water stored in system storage during above average supply conditions (surplus) provides a reserve against shortages when supply sources are limited or disrupted. System storage also preserves Metropolitan's capability to deliver water during scheduled maintenance periods, when conveyance facilities must be removed from service for rehabilitation, repair, or maintenance. The potential benefit of system storage in fiscal year 2016/17 is shown in Table 1.

Conveyance and Distribution System Benefits

Metropolitan has an ongoing commitment, through physical system improvements and the maintenance and rehabilitation of existing facilities, to maintain the reliable delivery of water throughout the entire service area. System improvement projects include additional conveyance and distribution facilities to maintain the dependable delivery of water supplies, provide alternative system delivery capacity, and enhance system operations. Conveyance and distribution system improvement benefits also include projects to upgrade obsolete facilities or equipment, or to rehabilitate or replace facilities or equipment. These projects are needed to enhance system operations, comply with new regulations, and maintain a reliable distribution system. A list of conveyance and distribution system facilities is provided in Table 3 along with the fiscal year 2016/17 estimated conveyance and distribution system benefits.

Demand Management Program Benefits

Demand management programs that could be financed by the RTS Charge and standby charge include Metropolitan's participation in providing financial incentives to local agencies for the construction and development of local resource programs and conservation projects. Investments in demand side management programs like conservation, water recycling and groundwater recovery conserve and produce local supplies, reducing the need to provide additional imported water supplies and reducing demands on Metropolitan's system, thus helping to avoid and defer the need for additional conveyance, distribution, and storage facilities and reducing maintenance of those facilities. A summary of the estimated benefits of the demand management

programs as measured by Metropolitan's anticipated expenditures for these programs in fiscal year 2016/17 is shown in Table 1.

Local Resources Program

In 1982, Metropolitan's Board adopted the Local Resources Program (LRP) with the goal of developing local water resources in a cost-efficient manner. Financial incentives are provided to member agency-sponsored projects that best help the region achieve its local resource production goals of restoring degraded groundwater resources for potable use as well as developing recycled water and seawater desalination supplies. These projects provide new water supplies, which help avoid and defer the need for additional regional conveyance, distribution and storage facilities and reduce maintenance of those facilities.

Combined production from participating recycling and groundwater recovery projects produced approximately 242,000 acre-feet of water in fiscal year 2014/15 with financial incentive payments of about \$38 million. Regional recycling, recovered groundwater, and desalinated seawater production are projected to be about 669,000 acre-feet per year, by year 2025. An estimate of potential benefits as measured by Metropolitan's estimated incentive payments for recycling and groundwater recovery projects is shown in Table 2.

Water Conservation

Metropolitan actively promotes water conservation programs within its service area as a cost-effective strategy for ensuring the long-term reliability of supplies and as a means of reducing the need to expand and maintain system conveyance, distribution and treatment capacity. Through the Conservation Credits Program, Metropolitan reimburses local agencies for a share of their costs of implementing conservation projects. Since fiscal year 1990/91, Metropolitan has spent over \$495 million in financial incentives to support local conservation projects.

In 1991, Metropolitan agreed to implement conservation "Best Management Practices" (BMPs). By signing the California Urban Water Conservation Council's *Memorandum of Understanding Regarding Urban Water Conservation* (amended March 10, 2004), Metropolitan committed to implement proven and reliable water conserving technologies and practices within its jurisdiction. Based on Metropolitan's IRP, the Conservation Credits Program, in conjunction with plumbing codes and other conservation efforts, has saved over 2,222,000 acre-feet since inception through fiscal year 2014/15. In order to comply with the Governor's mandate of reducing demand by 20 percent by the year 2020, Metropolitan is working on increasing its conservation efforts in the next ten years to meet that request. Conservation is a critical element of Metropolitan's demand management program, effectively increasing the reliability of existing water supplies by lessening the need to import additional water while at the same time avoiding and deferring the need to expand system capacity and reducing maintenance of the system. An estimate of the potential benefits of water conservation projects as measured by Metropolitan's incentive payments is given in Table 2.

LONG-RANGE FINANCIAL PLANNING

Metropolitan's major capital facilities are financed largely from the proceeds of revenue bond issues, which are repaid over future years. The principal source of revenue for repayment of these bonds is water sales, which is currently Metropolitan's largest source of revenue. In addition, *ad valorem* property taxes provide an additional limited revenue source, which is used to pay pre-1978 voter-approved indebtedness.

Since the passage of Article XIIIA of the California Constitution, Metropolitan has necessarily relied more on water sales revenue than on *ad valorem* property taxes for the payment of debt. Water sales have become the dominant source of revenue, not only for operation and maintenance of the vast network of facilities supplying water to Southern California, but also for replacement and improvement of capital facilities.

The increased reliance on highly variable water sales revenue increases the probability of substantial rate swings from year to year mainly resulting from changing weather patterns. The use of water rates as a primary source of revenue has placed an increasing burden on ratepayers, which might more equitably be paid in part by assessments on land that in part derives its value from the availability of water. In December 1993, Metropolitan's Board approved a revenue structure that included additional charges to establish a commitment to Metropolitan's capital improvement program and provide revenue stability. This revenue structure included the RTS Charge.

Readiness-To-Serve Charge

As noted above, Metropolitan levies the RTS Charge on its member agencies to recover capital costs, including a portion of the debt service on bonds issued to finance capital facilities needed to meet existing demands on Metropolitan's system. The estimated potential benefits that could be paid by an RTS charge in fiscal year 2016/17 exceed \$406 million as shown in Table 1.

Although the RTS Charge could be set to recover the entire potential benefit amount, the General Manager is recommending that the RTS Charge only recover a portion of the total potential benefit. For fiscal year 2016/17, the amount of the total potential benefit to be recovered by the RTS Charge is estimated to be \$144,000,000. These funds, when combined with Metropolitan's overall financial resources, will result in greater water rate stability for all users throughout Metropolitan's service area. Consistent with the rate structure approved by the Board in October of 2001, the RTS Charge for fiscal year 2016/17 is allocated to each member agency on the basis of a ten-year rolling average of historic water purchases from Metropolitan ending June 30, 2015. This average includes all deliveries used to meet firm demand (consumptive municipal industrial demands), including water transfers and exchanges. The estimated fiscal year 2016/17 RTS Charge for each member agency is shown in Table 4.

Standby Charge Option

Metropolitan's Standby Charge is authorized by the State Legislature and has been levied by Metropolitan since fiscal year 1992/93. The Standby Charge recognizes that there are economic benefits to lands that have access to a water supply, whether or not such lands are using it. Utilization of the Standby Charge transfers some of the burden of maintaining Metropolitan's capital infrastructure from water rates and *ad valorem* taxes to all the benefiting properties within the service area. A fraction of the value of this benefit and of the cost of providing it can be effectively recovered, in part, through the levying of a standby charge. The projects to be supported in part by a Standby Charge are capital projects that provide both local and Metropolitan-wide benefit to current landowners as well as existing water users. The estimated potential benefits system-wide are several times the amount to be recovered by means of the Standby Charge.

Metropolitan will levy Standby Charges only within the service areas of the member agencies that request that the standby charge be utilized. The Standby Charge for each acre or parcel of less than an acre will vary from member agency to member agency, as permitted under the legislation establishing Metropolitan's Standby Charge. The water Standby Charge for each member agency will be the same as that levied by Metropolitan in fiscal year 1996/97 and is shown in Table 5.

The proposed Standby Charge includes the re-levying of water standby charges on: (1) parcels on which water standby charges have been levied in fiscal year 1996/97 and annually thereafter ("pre-1997 standby charges") and (2) parcels annexed to Metropolitan and to an electing member agency after January 1997 ("annexation standby charges"). Only land within member agencies which Standby Charges were levied in fiscal year 1996/97 will be subject to the re-levying of pre-1997 Standby Charges for FY 2016/17. Only land annexed to Metropolitan and to an electing member public agency with respect to which standby charges were approved in accordance with the procedures of Article XIIID, Section 4 of the California Constitution will be subject to the levying or re-levying,

as applicable, of annexation standby charges for fiscal year 2016/17. Table 6 lists parcels annexed, or to be annexed, to Metropolitan and to electing member agencies during FY 2016/17, such parcels being subject to the annexation standby charge upon annexation. Parcels annexed prior to FY 2016/17 are subject to annexation standby charges as described in the Engineer's Report for the fiscal year of their annexation. These parcels and parcels that are subject to the pre-1997 standby charges are identified in a listing filed with the Executive Secretary.

The estimated potential benefits of Metropolitan's water supply program, which could be paid by a Standby Charge, exceed \$406 million for fiscal year 2016/17, as shown in Table 1. An average total Standby Charge of about \$93.53 per acre of land or per parcel of less than one acre would be necessary to pay for the total potential program benefits. Benefits in this amount will accrue to each acre of property and parcel within Metropolitan, as these properties are eligible to use water from the Metropolitan system. Because only properties located within Metropolitan's boundaries may receive water supplies from Metropolitan (except for certain contractual deliveries as permitted under Section 131 of the Metropolitan Water District Act), any benefit received by the public at large or by properties outside of the proposed area to be annexed is merely incidental.

Table 5 shows that the distribution of Standby Charge revenues from the various member agencies would provide net revenue flow of approximately \$43.6 million for fiscal year 2016/17. This total amount is less than the estimated benefits shown in Table 1. Metropolitan will use other revenue sources, such as water sales revenues, RTS Charge revenues (except to the extent collected through standby charges, as described above), interest income, and revenue from sales of hydroelectric power, to pay for the remaining program benefits. Thus, the benefits of Metropolitan's investments in water conveyance, storage, distribution, and demand management programs far exceed the recommended standby charge.

Equity

The RTS Charge is a firm revenue source. The revenues to be collected through this charge will not vary with sales in the current year. This charge is levied on Metropolitan's member agencies and is not a fee or charge upon real property or upon persons as an incident of property ownership. It ensures that agencies that only occasionally purchase water from Metropolitan but receive the reliability benefits of Metropolitan's system pay an equitable share of the costs to provide that reliability. Within member agencies that elect to pay the RTS Charge through Metropolitan's standby charges, the Standby Charge results in lower water rates than would otherwise be necessary due to the amount of revenue collected from lands which benefit from the availability of Metropolitan's water supply. With the Standby Charge, these properties are now contributing a more appropriate share of the cost of importing water to Southern California and delivering water.

Metropolitan's water supply program increases the availability and reliable delivery of water throughout Metropolitan's service area. Increased water supplies benefit existing consumers and land uses through direct deliveries to consumers and properties, and through the replenishment of groundwater basins and reservoir storage as reserves against shortages due to droughts, natural emergencies, or scheduled facility shutdowns for maintenance. The benefits of reliable water supplies from the SWP, CRA, DVL, and system improvements accrue to more than 250 cities and communities within Metropolitan's six-county service area. Metropolitan's regional water system is interconnected, so water supplies from the SWP and CRA can be used throughout most of the service area and therefore benefit water users and properties system-wide.

Additional Metropolitan deliveries required in the coming fiscal year due to the demands of property development will be reduced by the implementation of demand management projects, including water conservation, water recycling, and groundwater recovery projects. As with the SWP, CRA and DVL and the conveyance and distribution facilities, demand management programs increase the future reliability of water supplies. In addition, demand management programs provide system-wide benefits by effectively decreasing the demand for imported water, which helps to avoid and defer construction of additional system conveyance and distribution capacity and

reduce maintenance of the system. However, the abilities of each member agency to implement these projects under Metropolitan's financial assistance programs vary, depending on local conditions.

A major advantage of a firm revenue source, such as a RTS charge, is that it contributes to revenue stability during times of drought or low water sales. It affords Metropolitan additional security, when borrowing funds, that a portion of the revenue stream will be unaffected by drought or by rainfall. This security will help maintain Metropolitan's historically high credit rating, which results in lower interest expense to Metropolitan, and therefore, lower overall cost to the residents of its service area.

SUMMARY

The foregoing and the attached tables describe the current benefits provided by the projects listed as mainstays to the water supply system for Metropolitan's service area. Benefits are provided to both water users and property owners. The projects represented by this report provide both local benefits as well as benefits throughout the entire service area. It is recommended, for fiscal year 2016/17, that the RTS Charge be levied with an option for local agencies to request that a Standby Charge be levied on lands within Metropolitan's service area as a credit against such member agency's RTS Charge, up to the Standby Charge per acre or parcel of less than one acre levied by Metropolitan within the applicable member agency for fiscal year 2016/17. The maximum Standby Charge would not exceed \$15 per acre of land or per parcel of less than one acre. The benefits described in this Engineer's Report exceed the recommended charge. A listing of all parcels in the service area and the proposed 2016/17 Standby Charge for each is available in the office of the Chief Financial Officer.

Prepared Under the Supervision of:

Robert L. Harding, RCE C50185

Unit Manager V

Water Resource Management

Prepared Under the Supervision of:

Gary Breaux

Assistant General Manager/

Chief Financial Officer



TABLE 1

ESTIMATED DISTRIBUTION OF BENEFITS OF CONVEYANCE, STORAGE, AND DISTRIBUTION INFRASTRUCTURE, AND DEMAND MANAGEMENT PROGRAMS THAT COULD BE PAID BY RTS CHARGE

Water Conveyance, Storage, Distribution and Demand Management Programs	Estimated Potential Program Benefits for FY2016/17		Dollars Per Parcel of 1 Acre or Less	
Net Capital Payments to State Water Project (less portion paid by property taxes)	\$	70,246,879	\$16.18	
Non Tax Supported Capital Costs for System Storage ¹	\$	104,831,896	\$24.14	
Non Tax Supported Capital Costs for Conveyance and Distribution System ²	\$	155,929,608	\$35.91	
Sub-Total Capital Payments	\$	331,008,383	\$76.23	
less Estimated Standby Charge Revenues	\$	(43,624,493)	(\$10.05)	
Remaining capital payments	\$	287,383,889	\$66.18	
Demand Management Programs: Water Recycling, Groundwater Recovery, and Water Conservation Projects	\$	75,129,611	\$17.30	
Sub-Total Capital Financing and Demand Management Programs Costs not Paid by Standby Charge Revenues	\$	362,513,501	\$83.48	
Total Benefits: Capital Financing and Demand Management Programs	\$	406,137,994	\$93.53	

Notes:

Totals may not foot due to rounding

^[1] System storage includes Diamond Valley Lake, Lake Mathews, Lake Skinner and several other smaller surface reservoirs which provide storage for operational purposes.

^[2] Conveyance and Distribution facilities include the Colorado River Aqueduct and the pipelines, laterals, feeders and canals that distribute water throughout the service area.

TABLE 2

WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS

	FY 2016/17
Project Name	Payment

Water Recycling Projects

\$32,793,981

Advanced Water Purification Facility Project

Alamitos Barrier Reclaimed Water Project

Anaheim Water Recycling Demonstration Project

Burbank Reclaimed Water System Expansion Proj.

Burbank Recycled Water System Expansion - Phase 2

Capistrano Valley Non-Domestic Water System Expansion

City of Industry Regional Water System - Rowland

City of Industry Regional Water System - USGVMWD

City of Industry Regional Water System - walnut

Development of Non-Domestic Water Sys. Exp. Ladera

Direct Reuse Project Phase IIA

Dry Weather Runoff Reclamation Facility

Eastern Recycled Water Expansion Project

Eastern Recycled Water Pipeline Reach 16

Eastern Regional Reclaimed Water System

El Toro Recycled Water Expansion

Encina Basin Water Rec. Prog - Phases I and II (5)

Escondido Regional Reclaimed Water Project

EVMWD Recycled Water Program

Glendale Verdugo-Scholl Canyon Recl. Water Proj. (4)

Glendale Water Reclamation Expansion Project

Green Acres Reclamation Project - Coastal

Green Acres Reclamation Project - MWDOC

Green Acres Reclamation Project - Santa Ana

Groundwater Replenishment System Talbert Seawater Intrusion Barrier Component

Hansen Area Water Recycling Project Phase 1

Hansen Dam Golf Course Water Reycling Project

Harbor Refinaries Recyceld Water Project

Harbor Water Recycling Project

IEUA Regional Recycled Water Dist. System

IRWD Recycled Water System Upgrade

Leo J. Vander Lanz (Alamitos Barrier Expansion)

Long Beach Reclamation Expansion Phase I

Los Angeles Taylor Yard Park

Moulton Niguel Reclamation Project

TABLE 2 (Continued)

WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS

FY 2016/17
Project Name Payment

Water Recycling Projects (continued)

North Atwater, Chevy Chase Park, Los Felis Water Reycling Project

North City Water Reclamation Project

Oceanside Water Reclamation Project

Olivenhain Recycled Project - SE Quadrant

Otay Recycled Water System

Padre Dam Reclaimed Water System Phase I

Ramona/Santa Maria Water Reclamation Project

Rancho California Reclamation Expansion

Reclaimed Project at Century and Rio Hondo

San Clemente Recycled Water System Expansion

San Clemente Water Reclamation Project

San Elijo Water Reclamation System

Sepulveda Basin Water Recycling Project Phase IV

South Grifith Park Recycled Water Project

Trabuco Canyon Reclamation Expansion Project

Van Nuys Area Water Recycling Project

West Basin Water Reclamation Program

West Basin Water Recycling Phase V Expansion Project

TABLE 2 (Continued)

WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS

Project Name	FY 2016/17 Payment
Groundwater Recovery Projects Beverly Hills Desalter Cal Poly Pomona Water Treatment Plant Capistrano Beach Desalter Chino Basin Desalination Program / IEUA Chino Basin Desalination Program / Western Irvine Desalter IRWD Wells 21 and 22 Lower Sweetwater Desalter Phase 1 Madrona Desalter (Goldsworthy) Menifee Basin Desalter Mesa Consolidated Colored Water Treatment Facility Oceanside Desalter Phase I and II (1) Pomona Well # 37 Round Mountain Water Treatment Plant San Juan Desalter Temescal Basin Desalting Facility	\$10,933,130
Future Supply Actions	\$4,402,500
Conservation Projects Regionwide Residential Regionwide Commercial Member Agency Administered/MWD Funded Water Incentive Savings Program Grants Programs - Weather Based Irrigation Controllers	\$27,000,000
Total Demand Management Programs	\$75,129,611

Description

Storage Facilites GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER 102677 - JENSEN, REPAIR COVER OVER RESERVOIR 1 ALAMEDA CORRIDOR, PIPELINE RELOCATION, PROTECTION CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000-LIVE OAK CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000-MORRIS DAM CHINO BASIN GROUNDWATER SERVICE CONNECTION CB-15T CHLORINATION AND PH CONTROL FACILITIES- ORANGE COUNTY & GARVEY CLEARING OF LAKE MATHEWS RESERVOIR AREA CONVERSION OF DEFORMATION SURVEY MONITORING AT COPPER BASIN COPPER BASIN AND GENE WASH DAM, INSTALL SEEPAGE ALARM (50/50) COPPER BASIN RESERVOIR SUPERVISORY CONTROL COPPER BASIN SEWER SYSTEM COPPER BASIN SEWER SYSTEM CORONA DEL MAR RESERVOIR- REPLENISHMENT CORONA DEL MAR RESERVOIR-: CHLORINATION STATION CRANE - LAKE MATHEWS OUTLET TOWER (ORG CONST) DIAMOND VALLEY LAKE, CAL PLAZA CHARGES DIAMOND VALLEY LAKE, CONSULTANT COSTS DIAMOND VALLEY LAKE, DAM DEFORMATION MONITORING DIAMOND VALLEY LAKE, EAST DAM SUMP PUMP ELECTRICAL STUDY DIAMOND VALLEY LAKE, GENERAL CONSTRUCTION MGMT, 2000-2001 DIAMOND VALLEY LAKE, INUNDATION MAPS DIAMOND VALLEY LAKE, UNDERGROUND TANK CLOSURE DIAMOND VALLEY RECREATION, EAST MARINA DIAMOND VALLEY RECREATION, FISHERY DIAMOND VALLEY RECREATION, MUSEUM FOUNDATION REHABILITATION DIAMOND VALLEY RECREATION, MISSEM FOUNDATION REHABILITATION DIAMOND VALLEY RECREATION, SEARL PARKWAY IMPROVEMENTS, PHASE I DIAMOND VALLEY TRAILS PROGRAM, TRAILS DISTRICT DESIGN AND INSPECTION - MORRIS DAM DISTRICT RESERV. AQUEOUS AMMONIA FEED SYSTEM DISTRICT RESERVOIR - LONGTERM CHEMICAL FAC CONTAINMENT DOMESTIC WATER SUPPLY - LAKE MATHEWS (ORG CONST) DOMESTIC WATER SYSTEM - LAKE MATHEWS (ORG CONST) DOMESTIC WATER SYSTEM - LAKE MATHEWS (ORG CONST) DOMESTIC WATER SYSTEM-PALOS VERDES RESERVOIR (INTERIM CONST) DVL - SEARL PARKWAY EXTENSION - PHASE 2 DVL - SEARL PARKWAY LANDSCAPING DVL RECREATION - ALTERNATE ACCESS ROAD DVL RECREATION, COMMUNITY PARK AND REGIONAL AQUATIC FACILITY DVL SECURITY ENHANCEMENT DVL, CONSTRUCTION DVL, CONSTRUCTION CLAIMS SUPPORT DVL, CONSTRUCTION CLAIMS SUPPORT DVL, CONSTRUCTION MANAGEMENT SERVICE DVL, CONSTRUCTION SUPERVISION DVL, CONSTRUCTION, WEST DAM FOUNDATION DVL, DEDICATION CEREMONY DVL, DISTURBED DVL, DISTURBED DVL, DOMENIGONI PARK DVL, EAST DAM DVL, EAST DAM EMBANKMENT DVL, EAST DAM FENCING DVL, EAST DAM MILET OUTLET TOWER CONSTRUCTION DVL, EAST DAM INCET OUTLET TOWER CO DVL, EAST DAM LANDSCAPE SCREENING DVL, EAST DAM NORTH RIM REMEDIATION DVL, EAST DAM P-1 FACILITIES DVL, EAST DAM SITE COMPLETION DVL, EAST DAM STATE STREET IMPROVEMENTS DVL, EAST DAM VERTICAL SLEEVE VALVE DVL, EAST DAM VERTICAL SLEEV DVL, EAST MARINA, PHASE 2 DVL, EXCAVATION DVL, FIXED CONE, SPHERE DVL, GENERAL DVL, GRADING OF CONT DVL, INSTALL NEW WATERLINE DVL, MISC SMALL CONS DVL, NORTH HIGH WATER ROAD DVL, P-1 PUMPING FACILITY DVL PROCUIEMENT DVL, PROCUREMENT DVL, SCOTT ROAD EXTENSION DVL, SCOTT ROAD EXTENSION DVL, SOUTH HIGH WATER ROAD & QUARRY DVL, SPILLWAY DVL, START UP DVL, VALLEY-WIDE SITE ROUGH GRADING DVL, WORK PACKAGE DVL, WORK PACKAGE 10, INLET OUTLET WORK DVL, WORK PACKAGE 11, FORERAY DVL, WORK PACKAGE 11, FOREBAY DVL, WORK PACKAGE 12, TUNNEL DVL, WORK PACKAGE 12, TUNNEL DVL, WORK PACKAGE 13, P-1 PUMP OPERATIONS FACILITY DVL, WORK PACKAGE 14, PC-1 DVL, WORK PACKAGE 15, SITE CLEARING DVL, WORK PACKAGE 16, GROUNDWATER MONITORING DVL, WORK PACKAGE 17, FIELD OFFICE DVL, WORK PACKAGE 18, TEMPORARY VISITOR CENTER DVL, WORK PACKAGE 19, PERMANENT VISITOR CENTER DVL, WORK PACKAGE 12, EASTSIDE PIPELINE DVL, WORK PACKAGE 20, EAST DAM EYCAVATION FOLINIOR DVL, WORK PACKAGE 20, EAST DIME FIFELINE DVL, WORK PACKAGE 20, EAST DAM EXCAVATION, FOUNDATION DVL, WORK PACKAGE 21, WEST DAM EXCAVATION, FOUNDATION DVL, WORK PACKAGE 23, WEST RECREATION AREA DVL, WORK PACKAGE 24, EAST RECREATION AREA DVL, WORK PACKAGE 25, EXCAVATION DVL, WORK PACKAGE 26, ELECTRICAL TRANSMISSION LINES DVL, WORK PACKAGE 27, MAJOR EQUIPMENT P-1 DVL, WORK PACKAGE 28, MAJOR EQUIPMENT, GATES DVL, WORK PACKAGE 29, MAJOR EQUIPMENT, PC-1 DVL, WORK PACKAGE 30, INSTRUMENTATION AND CONTROL SYSTEMS DVL, WORK PACKAGE 31, GEOGRAPHICAL INFO DVI WORK PACKAGE 32 PERMIT DVL, WORK PACKAGE 33, MAJOR EQUIPMENT, VALVES

```
Storage Facilites
DVL, WORK PACKAGE 34, EMERGENCY RELEASE
DVL, WORK PACKAGE 34, EMERGENCY RELEASE
DVL, WORK PACKAGE 35
DVL, WORK PACKAGE 36, TRANSMISSION LINE TO PC-1
DVL, WORK PACKAGE 38, RUNOFF EROSION
DVL, WORK PACKAGE 39, SADDLE DAM FOUNDATION
 DVL, WORK PACKAGE 4, NEWPORT ROAD RELOCATION
DVL, WORK PACKAGE 40
DVL, WORK PACKAGE 42, GEOTECHNICAL
DVL, WORK PACKAGE 43, MOBILIZATION
DVL, WORK PACKAGE 43, MOBILIZATION
DVL, WORK PACKAGE 44, SITE DEVELOPMENT
DVL, WORK PACKAGE 47, HAZARDOUS MATERIAL
DVL, WORK PACKAGE 48, GENERAL ADMIN
DVL, WORK PACKAGE 49
DVL, WORK PACKAGE 49
DVL, WORK PACKAGE 5, SALT CREEK FLOOD CONTROL
DVL, WORK PACKAGE 52, HISTORY ARCHEOLOGY INVENTORY
DVL, WORK PACKAGE 53, PREHISTORIC ARCHEOLOGY
DVL, WORK PACKAGE 53, PREHISTORIC ARCHEOLOGY
DVL, WORK PACKAGE 54, PLANTS, WILDLIFE
DVL, WORK PACKAGE 55, AIR QUALITY, NOISE
DVL, WORK PACKAGE 6, SURFACE WATER MITIGATION
DVL, WORK PACKAGE 7, DESIGN WEST DAM ACCESS
DVL, WORK PACKAGE 8, DESIGN EAST DAM ACCESS
DVL, WORK PACKAGE 9, SADDLE DAM
DVL, WORKING INVENTORY, 80,000 ACRE FEET (10% OF CAPACITY)
  EAST DAM TUNNELS
EAST MARINA BOAT RAMP EXTENSION
 EAST MAKINA BOAT RAMP EXTENSION
ELECTRICAL SERVICE - LAKE MATHEWS (ORG CONST)
ELECTRICAL SYSTEM - LAKE MATHEWS (ORG CONST)
FIRST SAN DIEGO AQUEDUCT - REPLACE PIPELINE SECTION BOTH BARRELS
FLOATING BOAT HOUSE - LAKE MATHEW
FLOOD RELEASE VALVE, MORRIS DAM & WATER SUPPLY SYSTEM,PV RESER.
   FOOTBRIDGE - LAKE MATHEWS (ORG CONST)
FOOTHILL FEEDER- LIVE OAK RESERVOIR- CLAIMS
FOOTHILL FEEDER- LIVE OAK RESERVOIR- CLAIMS
FOOTHILL FEEDER- LIVE OAK RESERVOIR- RESIDENCE
GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER
GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER (RETIREMENT)
GARVEY RESERVOIR - JUNCTION STRUCTURE, REPLACE VALVE # 1
GARVEY RESERVOIR- EMERGENCY GENERATOR
GARVEY RESERVOIR- FLOATING COVER
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1
 GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1 - INTEREST
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1 - INTEREST
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVES # 4 & 5
GARVEY RESERVOIR- MODIFY DESILTING BASINS
GARVEY RESERVOIR REPAIR
GARVEY RESERVOIR REPAIR
GARVEY RESERVOIR, LOWER ACCESS ROAD, PAVING & DRAINS
GARVEY RESERVOIR, REPLACE VALVE # 4 & 5
GARVEY RESERVOIR, TWO VALVES AT JUNCTION STRUCTURE
GARVEY RESERVOIR. TWO VALVES AT JUNCTION STRUCTURE
GARVEY RESERVOIR: TWO COTTAGES WITH GARAGES
GARVEY RESERVOIR-HYPOCHLORINE STATION
GARVEY RESERVOIR-INLET AND OUTLET CONDUIT SYSTEM MODIFICATION
GARVEY RESERVOIR-JUNCTION STRUCTURE REPLACE TWO VALVES
GARVEY RSVR REPLACE VENTURI THROAT SECTION
GARVEY RSVR-REPLACE CENETRUI THROAT SECTION
HEADWORKS OF DISTRIBUTION SYSTEM LAKE MATHEWS
   HEADWORKS OF DISTRIBUTION SYSTEM LAKE MATHEWS 
HEADWORKS: ADDITIONAL VALVES
HEADWORKS: ADDITIONAL VALVES
HEADWORKS: MOTOR OPERATED SLIDE GATES
HOUSE AND GARAGE AT CORONA DEL MAR RESERVOIR
HOUSE AND GARAGE AT ORANGE COUNTY RESERVOIR
HOUSE AT PALOS VERDES RESERVOIR
HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1939
HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1955
IOC - DIAMOND VALLEY LAKE
OF DIAMOND VALLEY LAKE
 IOC - DIAMOUND VALLEY LAND
IOC - DIEMER, RESERVOIR SEISMIC UPGRADES
IOC - GARVEY RESERVOIR REPAIR
IOC - GARVEY RESERVOIR, HYPOCHLORINATION SYSTEM
IOC - LAKE MATHEWS OUTLET FACILITIES
IOC - LAKE MATHEWS OUTLET FACILITIES
IOC - LAKE MATHEWS WATERSHED
IOC - LAKE SKINNER BYPASS PIPELINE #2 AND #3
IOC - ORANGE COUNTY RSVR, REPLACE CHLORINATION SYSTEM
IOC - PALOS VERDES RSVR, REPLACE CHLORINATION SYSTEM
LAKE MATHEWS - REPLACE STANDBY GENERATOR
LAKE MATHEWS - ELECTRICAL SYSTEM IMPROVEMENT
LAKE MATHEWS BUILDING
   LAKE MATHEWS BUILDINGS 8 & 15, RENOVATION OF ASSEMBLY AREA AND ADMIN. BLDG.
LAKE MATHEWS- CARPENTER AND VEHICLE MAINTENANCE BUILDING
   LAKE MATHEWS - CHAPENIER AND VENICLE MAIN LENANCE BUILDING
LAKE MATHEWS - CHLORINATION FACILITIES
LAKE MATHEWS - CHLORINATION FACILITY - REPLACE CHLORINATION EOPMT.
LAKE MATHEWS CHTR. TOWER-REPL. 45 30-INCH GATE/BUTTERFLY VALVES
LAKE MATHEWS CONTROL TOWER - REPLACE 45 10-INCH GATE VALVE
   LAKE MATHEWS DIKE
   LAKE MATHEWS DIVERSION TUNNEL
 LAKE MATHEWS DIVERSION TUNNEL
LAKE MATHEWS DIVERSION TUNNEL WALKWAY REPAIR
LAKE MATHEWS-DOCK AND BOAT SHELTER
LAKE MATHEWS DOMESTIC FACILITIES
LAKE MATHEWS-DOMESTIC WATER SYSTEM
LAKE MATHEWS- ELECTRICAL SYSTEM IMPROVEMENT
   LAKE MATHEWS- EMERGENCY GENERATOR
LAKE MATHEWS ENLARGEMENT (SPEC NO. 505)
  LAKE MATHEWS FOREBAY OUTLET STRCTR-REPL.CONCRETE BLOCK BLDG
LAKE MATHEWS FOREBAY OUTLET, CONCRETE BLDG
LAKE MATHEWS FOREBAY. REPLACE FOOTBRIDGE
LAKE MATHEWS FOREBAY- REPLACE FOOTBRIDGE
LAKE MATHEWS HEADWORKS-INSTALL AIR MTRS,3 HOWELL BNGR VALVE OP.
   LAKE MATHEWS- HOUSE AND GARAGE
   LAKE MATHEWS- IMPROVE MAIN SUBSTATION
LAKE MATHEWS- IMPROVEMENT OF DOMESTIC WATER & FIRE PROT. SYSTEM
 LAKE MATHEWS -LUMBER STORAGE BUILDING
```

```
Storage Facilites
LAKE MATHEWS -LUMBER STORAGE BUILDING - INTEREST
 LAKE MATHEWS LUMBER STORAGE ROOF COVER
LAKE MATHEWS MAIN DAM AND SPILLWAY
LAKE MATHEWS MAIN DAM SUB DRAIN SYSTEM
LAKE MAI HEWS MAIN DAM SUB DRAIN SYSTEM
LAKE MATHEWS MAINTENANCE BUILDING
LAKE MATHEWS MAINTN.FACILITIES-REPLACE 75 KVA TRANSFORMER.SERV.
LAKE MATHEWS- MODIFY CHLORINATION
LAKE MATHEWS- MODIFY CHLORINE STORAGE TANK FOUNDATIONS
 LAKE MATHEWS- MODIFY ELECTRICAL SERVICE
LAKE MATHEWS- MULTIPLE SPECIES RESERVE, MANAGER'S OFFICE AND RESIDENCE
 LAKE MATHEWS OFFICE BLDG MODIFICATIONS-AMERICANS W/ DISABILITY LAKE MATHEWS OFFICE TRAILER MODIFICATIONS-AMERICANS W/ DISABILITY
LAKE MATHEWS OFFICE TRAILER MODIFICATIONS-AMERICANS W/ DISABIL

LAKE MATHEWS -OPERATOR RESIDENCE

LAKE MATHEWS OULET TOWER

LAKE MATHEWS OUTLET FACILITIES

LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES

LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES (RETIREMENT)
 LAKE MATHEWS OUTLET TUNNEL
 LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER
LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER - INTEREST
 LAKE MATHEWS- PROPANE STORAGE TANK
LAKE MATHEWS- PROPANE STORAGE TANK - INTEREST
 LAKE MATHEWS- REPLACE HOWELL-BUNGER VALVE OPERATORS
LAKE MATHEWS- REPLACE VALVES
LAKE MATHEWS RESERVOIR - RELOCATE SOUTHERLY SECURITY FENCE
LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE
LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE - INTEREST
 LAKE MATHEWS RESERVOIR RELEGGATE SOOTH
LAKE MATHEWS- SEEPAGE ALARMS - INTEREST
 LAKE MATHEWS- SPRAY PAINT BOOTH
LAKE MATHEWS WATERSHED, DRAINAGE
 LAKE MATHEWS, HAZEL ROAD
LAKE MATHEWS, REPLACE CHLORINATION EQUIPMENT
 LAKE MATHEWS, DIKE #1- INSTALL PIEZOMETERS, STAS.55+00 & 85+50 LAKE MATHEWS: VALVES AND FITTINGS IN HEADWORKS
 LAKE MATHEWS-CONST. CONCR.TRAFFIC BARR. WALL TO PROTECT HQ FACIL.
LAKE MATTHEWS FIRE WATER LINE
LAKE PRRIS POLLUTION PREVENTION AND SOURCE WATER PROTECTION (CAPITAL PORTION)
LAKE PERRIS POLLUTION PREVENTION AND SOURCE WATER PROTECTION (CAPITAL LAKE SKINNER - AERATION SYSTEM 
LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN 
LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN - INTEREST 
LAKE SKINNER - INSTALL OUTLET CONDUIT FLOWMETER
LAKE SKINNER (AULD VALLEY RESERVOIR)- CLAIMS
LAKE SKINNER (AULD VALLEY RESERVOIR)- CLAIMS
LAKE SKINNER AERATOR AIR COMPRESSORS REPLACEMENT
LAKE SKINNER- EQUIPMENT YARD SECURITY
LAKE SKINNER- EQUIPMENT YARD SECURITY - INTEREST
LAKE SKINNER - EQUIPMENT YARD SECURITY - INTERES
LAKE SKINNER FACILITIES - EMPLOYEE HOUSING
LAKE SKINNER FACILITIES - FENCING
LAKE SKINNER FACILITIES - FENCING
LAKE SKINNER FACILITIES - LANDSCAPING
LAKE SKINNER FACILITIES - RELOCATE BENTON ROAD
LAKE SKINNER FOODANE STORAGE TANK
LAKE SKINNER - PROPANE STORAGE TANK
LAKE SKINNER - PROPANE STORAGE TANK
 LAKE SKINNER- PROPANE STORAGE TANK - INTEREST
LIVE OAK RESERVOIR & RESERVOIR BYPASS SCHEDULE 264A
LIVE OAK RESERVOIR & RESERVOIR BYPASS SCHEDULE 264A
LIVE OAK RESERVOIR SURFACE REPAIR
MAINTENANCE FACILITIES, 75KVA TRANSFORMER SERVICE-LAKE MATHEWS (ORG CONST)
MINOR CAPITAL PROJECTS FOR FY 1989/90 - LAKE MATHEWS
MINOR CAPITAL PROJECTS FOR FY 1989/90 - PALOS VERDES RESERVOIR
MINOR CAPITAL PROJECTS-LAKE SKINNER, INLET CANAL ELECTRIC FISH BARRIER
MINOR CAPITAL PROJECTS-LIVE OAK RESERVOIR, DESILT BASIN IMPROVEMENTS
MODIFICATION OF THE LAKE MATHEWS SERVICE WATER SYSTEM
 MORRIS DAM COTTAGE
MORRIS DAM-ENLARGMT. OF SPILLWAY FACLT.& UPPER FDR.VALVE MODF
MORRIS DAM ROAD IMPROVEMENT
MORRIS DAM, SEISMIC STABILITY REANALYSIS
MORRIS DAM-REPLACE EMERGENGY POWER SYSTEM
MORRIS RESERVOIR- CAPITAL OBLIGATION PAID
MORRIS RESERVOIR- INTEREST OBLIGATION PAID
MORRIS RESERVOIR- INITEREST OBLIGATION PAID
O.C.RESERVOIR - IMPROVE DOMESTIC SYSTEM
ORANGE COUNTY RESERVOIR -- JUNCTION STRUCTURE,REPLACE VALVE # 1
ORANGE COUNTY RESERVOIR (SPEC NO. 341)
ORANGE COUNTY RESERVOIR CHLORINATION STATION
ORANGE COUNTY RESERVOIR- EMBANKMENT AND SPILLWAY ORANGE COUNTY RESERVOIR- EMERGENCY GENERATOR
ORANGE COUNTY RESERVOIR-EMERGENCY GENERALOR
ORANGE COUNTY RESERVOIR-HOUSE
ORANGE COUNTY RESERVOIR-HOUSE
ORANGE COUNTY RESERVOIR-MODIFY DOMESTIC WATER SYSTEM
ORANGE COUNTY RESERVOIR-FEPLACE RESIDENCE NO. 95D
ORANGE COUNTY RESERVOIR-MODIFY ELEC. CONTROL CENTER
 ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION EQUIPMENT
ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION SYSTEM P V RESERVOIR-REPLACE CHLORINATION SYSTEM
 PALOS VERDES CHLORINATION STATION AND COTTAGE
 PALOS VERDES RESERVOIR
PALOS VERDES RESERVOIR - INLET/OUTLET TOWER
PALOS VERDES RESERVOIR- BY PASS PIPELINES
PALOS VERDES RESERVOIR- FENCING AROUND
PALOS VERDES RESERVOIR- REPLACE DOMESTIC WATER SYSTEM PIPING PALOS VERDES RESERVOIR, BYPASS PIPELINE RELIEF STRUCTURE MODIFN
PALOS VERDES RESERVOIR, COVERING
PALOS VERDES RESERVOIR, COVERING
PALOS VERDES RESERVOIR, REPLACE ACCESS AND PERIMETER ROADS
PALOS VERDES RESERVOIR: INCREASING ELEVATION OF SPILLWAY CREST
 PALOS VERDES RESERVOIR-INSTALL VALVE & CHLORINATION NOZZLE, INL. TWR
PALOS VERDES RESERVOIR-REPLACE CHI ORINATION SYSTEM
PAMO RESERVOIR- WATER STORAGE FEASIBIILITY STUDY
```

Description

Storage Facilites
PAMO RESERVOIR- WATER STORAGE FEASIBILITY STUDY- INTEREST RECORD DRAWING RESTORATION PROGRAM, CRA REPAIRS TO AZUSA CONDUIT REPLACE 32

REPAIRS TO AZUSA CONDUIT
REPLACE 32
REPLACE 32
REPLACEMENT OF A 30 INCH GATE VALVE P.V.R.
RESIDENCE # 95-D, ORANGE COUNTY RESERVOIR
RESIDENCE 45-D - CORONA DEL MAR RESERVOIR
RESIDENCE 80-D - DE LAKE MATHEW
RESIDENCE 91-D - SAN JACINTO RESERVOIR
ROADS AT LAKE MATHEWS ABOVE FLOODLINE
SAN DIEGO ACQUEDUCT: COTTAGE AT SAN JACINTO RESERVOIR
SAN DIEGO ACQUEDUCT: COTTAGE AT SAN JACINTO RESERVOIR
SAN DIEGO ACQUEDUCT: COTTAGE AT SAN JACINTO RESERVOIR
SECOND OUTLET, PALOS VERDES RESERVOIR (SPEC NO. 597)
SEEPAGE CONTROL AT LAKE MATHEWS
TEMPORARY EMPLOYEE LABOR SETTLEMENT
VALVE - GENE RESERVOIR (REPLACED 201)
VALVE STRUCTURE MODIFICATIONS-UPPER FDR, SAN GABRIEL CROSSING (INTERIM CONST)
VALVE, TWO 36
WADSWORTH PUMP PLANT CONDUIT PROTECTION
WADSWORTH PUMP PLANT, PUMP MOTOR CONVERSION
WATER QUALITY PROJECT UPSTREAM
WATER SUPPLY SYSTEM, OPERATING TOWER, LAKE MATHEWS

Sub-total Storage facilities benefits

104,831,896

```
Conveyance and Aqueduct Facilites
ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT
ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT ALL PUMPING PLANTS - 230 KV & 69 KV DISCONNECTS REPLACEMENT ALL PUMPING PLANTS - BRIDGE CRANES ALL PUMPING PLANTS - TRANSFORMER BANK BRIDGE ALLEN MCCOLLOCH PIPELINE - CORROSION INTERFERENCE MITIGATION ALLEN MCCOLLOCH PIPELINE - RIGHT OF WAY ALLEN MCCOLLOCH PIPELINE - UPDATE / MODIFY ALL BOYLE ENGINEERING DRAWINGS AMP VALVE & SERVICE CONNECTION VAULT REPAIR AQUEDUCT & PUMPING PLANT ISOLATION / ACCESS FIXTURES - STUDY AQUEDUCT & PUMPING PLANT ISOLATION GATES ARROWHEAD FAST TINNE! CONSTRUCTION
 ARROWHEAD EAST TUNNEL CONSTRUCTION
ARROWHEAD TDS REDUCTION
 ARROWHEAD TUNNELS CLAIMS COST
ARROWHEAD TUNNELS CONNECTOR ROAD
 ARROWHEAD TUNNELS CONSTRUCTION
ARROWHEAD TUNNELS ENGINEERING
 ARROWHEAD TUNNELS RE-DESIGN
  ARROWHEAD WEST TUNNEL CONSTRUCTION
 AULD VALLEY CONTROL STRUCTURE AREA FACILITIES UPGRADE STUDY
AUXILIARY POWER SYSTEM REHABILITATION / UPGRADES STUDY BACHELOR MOUNTAIN COMMUNICATION SITE ACQUISITION
BACHELOR MOUNTAIN TELECOM SITE IMPROVEMENTS
BANK TRANSFORMERS REPLACEMENT STUDY
BLACK METAL MOUNTAIN - COMMUNICATIONS FACILITY UPGRADE BOX SPRINGS FEEDER REHAB PHASE III
BOX SPRINGS FEEDER REFIABLE FIRASE III
BUDGET ADJUSTMENT
CABAZON RADIAL GATE FACILITY IMPROVEMENTS
CAJALCO CREEK MITIGATION FLOWS
CAST-IRON BLOW OFF REPLACEMENT - PHASE 4
CATHODIC PROTECTION STUDY - DESIGN AND CONSTRUCTION
 CCRP - BLOW-OFF VALVES PHASE 4 PROJECT CCRP - CONTINGENCY
 CCRP - EMERGENCY REPAIR
CCRP - HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB.
  CCRP - PART 1 & 2
 CCRP - FART 1 & 2
CCRP - SAND TRAP CLEANING EQUIPMENT & TRAVELING CRANE STUDY
 CCRP - TRANSITION & MAN-WAY ACCESS COVER REPLACEMENT - STUDY & DESIGN CCRP - TUNNELS STUDY
 CEPSRP - 230 KV SYSTEM SYNCHRONIZERS
CEPSRP - 230 KV SYSTEM SYNCHRONIZERS
CEPSRP - ALL PUMPING PLANTS - CONTINGENCY & OTHER CREDITS
CEPSRP - ALL PUMPING PLANTS - REPLACE 6.9 KV TRANSFORMER BUSHINGS
CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV , 69 KV & 6.9 KV LIGHTENING ARRESTERS
CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV TRANSFORMER PROTECTION
 CEPSRP - SWITCHYARDS & HEAD GATES REHABILITATION
CEPSRP- ALL PUMPING PLANTS - IRON MOUNTAIN - 230KV BREAKER SWITCH. INST.
 CEPSRP- ALL PUMPING PLANTS - IKON MODITAIN - 230KV BREAKER SWITCH. INST.
COLORADO RIVER AQUEDUCT - PUMPING
COLORADO RIVER AQUEDUCT - SIPHONS AND RESERVOIR OUTLETS REFURBISHMENT
COLORADO RIVER AQUEDUCT CONVEYANCE RELIABILITY, PHASE II REPAIRS AND INSTRUMENTATION
CONTROL SYSTEM DRAWING UPGRADE STUDY (PHASE 1) - STUDY
COPPER BASIN AND GENE DAM OUTLET WORKS REHABILITATION (STUDY & DESIGN)
 COPPER BASIN INTERIM CHLORINATION SYSTEM COPPER BASIN OUTLET GATES RELIABILITY
 COPPER BASIN OUTLET REHABILITATION
COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH DAM SLUICEWAYS REHABILITATION
 COPPER BASIN POWER & PHONE LINES REPLACEMENT
COPPER SULFATE STORAGE AT LAKE SKINNER AND LAKE MATHEWS
COPPER SULFATE STORAGE AT LAKE SKINNER AND LAKE MATHEWS
CORROSION CONTROL OZONE MATERIAL TEST FACILITY
COST OF LAND AND RIGHT OF WAY
CRA - ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT
CRA - AQUEDUCT AND PUMPING PLANT ISOLATION GATES
CRA - AQUEDUCT RESERVOIR AND DISCHARGE LINE ISOLATION GATES
CRA - AUXILIARY POWER SYSTEM REHAB
CRA - BANK TRANSFORMERS REPLACEMENT STUDY
 CRA - BLOW-OFF VALVES PHASE 4
CRA - CIRCULATING WATER SYSTEM STRAINER REPLACEMENT
 CRA - CONTROL SYSTEM IMPLEMENTATION PHASE CLOSE OUT
CRA - CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2
CRA - COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH SLUICEWAYS REHABILITATION CRA - COPPER BASIN POWER & PHONE LINES REPLACEMENT CRA - CUT & COVER FORNAT WASH EXPOSURE STUDY CRA - CUT AND COVER FORNAT WASH EXPOSURE STUDY
 CRA - DANBYTOWER FOOTER REPLACEMENT
CRA - DELIVERY LINE NO. 1 SUPPORTS REHAB - FIVE PUMPING PLANTS
CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - GENE & INTAKE
 CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - IRON, EAGLE, & HINDS
CRA - DESERT PUMP PLANT OIL CONTAINMENT
 CRA - DESERT SEWER SYSTEM REHABILITATION
CRA - DESERT SEWER SYSTEM REHABILITATION PROJECT
 CRA - DESERT WATER TANK ACCESS & SAFETY IMPROVEMENTS
CRA - DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION
CRA - DISCHARGE LINE ISOLATION GATES
CRA - DWCV-4 VALVE REPLACEMENT
 CRA - AUGUE MOUNTAIN SAND TRAPS INFLOW STUDY
CRA - EAGLE MOUNTAIN SAND TRAPS INFLOW STUDY
CRA - ELECTRICAL/ POWER SYST REL. PROG. - IRON MTN - 230KV BREAKER SWITC. INST.
CRA - GENE PUMPING PLANT MAIN TRANSFORMER AREA
CRA - GENE PUMPING PLANT MAIN TRANSFORMER AREA
CRA - HINDS PUMP UNIT NO. 8 REFURBISHMENT
CRA - INTOS PUMP UNIT NO. 8 REFURBISHMENT
CRA - INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU
CRA - INTAKE PUMPING PLANT AUTOMATION PROGRAMMING
CRA - INVESTIGATION OF SIPHONS AND RESERVOIR OUTLETS
CRA - IRON MTN. TUNNEL REHABILITATION
CRA - LAKEVIEW SIPHON FIRST BARREL - REPAIR DETERIORATED JOINTS
 CRA - MAIN PUMP MOTOR EXCITERS
CRA - MAIN PUMP STUDY
CRA - MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY CRA - PUMPING PLANT RELIABILITY PROGRAM CONTINGENCY
```

```
Conveyance and Aqueduct Facilites
CRA - PUMPING PLANTS VULNERABILITY ASSESSMENT
  CRA - PUMPING PLANTS VULNERABILITY ASSESSMENT
CRA - PUMPING WELL CONVERSION
CRA - QUAGGA MUSSEL BARRIERS
CRA - REAL PROPERTY - BOUNDARY SURVEYS
CRA - RELIABILITY PROGRAM 230 KV & 69 KV DISCONNECTS REPLACEMENT STUDY ( 5 PLANTS)
CRA - RELIABILITY PROGRAM INVESTIGATION
CRA - RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568
CRA - RELIABILITY PHASE II CONTINGENCY
CRA - RELIABILITY PHASE II CONTINGENCY
CRA - SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE
CRA - SERVICE CONNECTION DWCV-21 VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION
CRA - SERVICE CONNECTION DWCV-24 A, B, C, & D PLUG VALVES REPLACEMENT
CRA - SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS
CRA - SUCTION & DISCHARGE LINES EXPANSION JOINT REHAB
CRA - SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM
CRA - SUPTICHYARDS AND HEAD GATES REHAB
CRA - SWITCHYARDS AND HEAD GATES REHAB
CRA - TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT
CRA - TUNNELS VULNERABILITY STUDY - REPAIRS TO TUNNELS
CRA - WEST PORTAL UPGRADE - REHAB OF STILLING WELL, SLIDE GATE OPERATORS AND RADIAL GATES
CRA 2.4 KV STANDBY DIESEL ENGINE GENERATORS REPLACEMENT
CRA 230 KV & 69 KV DISCONNECTS SWITCH REPLACEMENT
CRA 230 KV SYSTEM INTER-AGENCY OPERABILITY UPGRADE
CRA 230 KV SYSTEM INTER-AGENCY OPERABILITY UPGRADE
CRA 230 KV SYSTEM INTER-AGENCY OPERABILITY UPGRADE
CRA 6.9 KV LEAD JACKETED CABLES
 CRA 230KV & 69KV PROTECTION PANEL UPGRADE
CRA 6.9 KV LEAD JACKETED CABLES
CRA 69KV PANEL UPGRADE
CRA 69KV PANEL UPGRADE
CRA ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT
CRA ALL PUMPING PLANTS - FLOW METER UPGRADES
CRA AQUEDUCT BLOCKER GATE REPLACEMENT
CRA AQUEDUCT ISOLATION GATES REPLACEMENT
CRA BLACK METAL COMMUNICATION SITE II UPGRADE
CRA AGUEDUCT BLOCKER GATE REPLACEMENT
CRA BLACK METAL COMMUNICATION SITE II UPGRADE
    CRA CANAL CRACK REHAB AND EVALUATION
CRA CANAL CRACK REHABILITATION
    CRA CANAL IMPROVEMENTS
CRA CIRCULATING WATER SYSTEM STRAINER REPLACEMENT
   CRA CONDUIT FORMAT WASH EROSION REPAIRS
CRA CONVEYANCE RELIABILITY PROGRAM (CCRP) - BLOW-OFF REPAIR
  CRA CONVEYANCE RELIABILITY PROGRAM (CCRP) - BLOW-OFF REPAIR
CRA CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2
CRA COPPER BASIN AND GENE WASH DAM SLUICEWAYS
CRA COPPER BASIN OUTLET GATES RELIABILITY STUDY
CRA DESERT AIRFIELDS IMPROVEMENT
CRA DISCHARGE CONTAINMENT PROGRAM - CONTINGENCY
CRA DISCHARGE CONTAINMENT PROGRAM - GENE & IRON DRAIN SYSTEMS
CRA DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION
  CRA DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION
CRA DISCHARGE CONTAINMENT PROGRAM - OIL & CHEMICAL UNLOADING PAD CONTAINMENT
CRA ELECTRICAL / POWER SYSTEM RELIABILITY PROGRAM (CEPSRP)
CRA ENERGY EFFICIENCY IMPROVEMENTS
CRA GENE PUMPING PLANT HEAVY EQUIPMENT SERVICE PIT
  CRA GENE PUMPING PLANT HEAVY EQUIPMENT SERVICE PIT
CRA GENE STORAGE WAREHOUSE REPLACEMENT
CRA HINDS PUMPING PLANT - WASH AREA UPGRADE
CRA INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT
CRA IRON GARAGE HEAVY EQUIPMENT SERVICE PIT REPLACEMENT
CRA IRON HOUSING REPLACEMENT
CRA IRON MOUNTAIN SUCTION JOINT REFURBISHMENT PILOT
CRA MAIN PUMP & MOTOR REFURBISHMENT
CRA MAIN PUMP CONTROLS & INSTRUMENTATION
CRA MAIN PUMP DISCHARGE VALVE REFURBISHMENT
CRA MAIN PUMP DISCHARGE VALVE REFURBISHMENT
CRA MAIN PUMP DIMP MOTOR EXCITERS ASSESSMENT
   CRA MAIN PUMP MOTOR EXCITERS ASSESSMENT CRA MAIN PUMP MOTOR EXCITERS REHABILITATION
   CRA MAIN PUMP STUDY
CRA MAIN PUMP STUDY
CRA MAIN PUMP SUCTION AND DISCHARGE LINES, EXPANSION JOINT REPAIRS
   CRA MAIN PUMPING PLANT DISCHARGE LINES, EXPANSION JOINT REPAIRS
CRA MAIN PUMPING PLANT DISCHARGE LINE ISOLATION BULKHEAD COUPLING CONSTRUCTION
CRA MAIN PUMPING PLANT SUBRICATION SYSTEM
CRA MAIN PUMPING PLANTS LUBRICATION SYSTEM
CRA MAIN PUMPING PLANTS SERVICE WATER & SAND REMOVAL SYSTEM
CRA MAIN TRANSFORMER REPLACEMENT/REHAB.
   CRA MILE 12 POWER LINE & FLOW MONITORING EQUIP. STUDY 
CRA PROTECTIVE SLABS
  CRA PROTECTIVE SLABS

CRA PUMP PLANT FLOW METER UPGRADE

CRA PUMP PLANT SUMP PIPING REPLACEMENT STUDY

CRA PUMP PLANT SUMP PIPING REPLACEMENT STUDY

CRA PUMP PLANTS 2300KV & 480 V SWITCHRACK REHAB

CRA PUMP PLANTS 2300KV & 480 V SWITCHRACK REHAB

CRA PUMP WELLS CONVERSION AND BLOW-OFF REPAIR

CRA PUMPING PLANT REHABILITATION STUDY

CRA PUMPING PLANT RELIABILITY PROGRAM - HIGH PRESSURE COMPRESSOR REPLACEMENT

CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY

CRA PUMPING PLANT SUMP SYSTEM REHABILITATION

CRA PUMPING PLANT WASTEWARTER SYSTEM REHABILITATION
    CRA PUMPING PLANT WASTEWATER SYSTEM - GENE & IRON MTN
CRA PUMPING PLANT WASTEWATER SYSTEM - INTAKE
  CRA PUMPING PLANT WASTEWATER SYSTEM - INTAKE
CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT - HINDS & EAGLE MTN.
CRA PUMPING PLANTS - AUXILIARY POWER SYSTEM REHABILITATE/JPGRADES
CRA PUMPING PLANTS 230KV & 69K DISCONNECT SWITCH REPLACEMENT
CRA PUMPING PLANTS ASPHALT REPLACEMENT
CRA PUMPING PLANTS CRANE IMPROVEMENTS
CRA PUMPING PLANTS SWITCH HOUSE FAULT CURRENT PROTECTION
CRA PUMPING PLANTS VULNERABILITY ASSESSMENT
CRA PUMPING PLANTS WATER TREATMENT SYSTEMS REPLACEMENT
CRA PUMPING PLANTS WATER TREATMENT SYSTEMS REPLACEMENT
CRA PUMPING PLANTS WATER TREATMENT SYSTEMS REPLACEMENT
CRA PUMPING PLA TELIABILITY PROGRAM, DISCHARGE LINE COUPLING INSTALLATION
CRA PUMPING WEIT CONVERSION
   CRA PUMPING WELL CONVERSION
CRA QUAGGA MUSSEL BARRIERS
   CRA RADIAL GATES AND SLIDE GATE REHABILITATION 
CRA RADIAL GATES REPLACEMENT
   CRA RADIAL GATES REPLACEMENT
CRA RELIABILITY PHASE II - PUMPING PLANTS 230KV & 69KV DISCONNECT SWITCH REPLACEMENT
CRA RELIABILITY PROGRAM - DISCHARGE VALVE LUBRICATORS
CRA RELIABILITY PROGRAM - MOTOR BREAKER FAULTY CURRENT STUDY (5 PLANTS)
CRA RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568
CRA RELIABILTY PHASE II - PUMPING PLANT SWITCH HOUSE FAULT CURRENT PROTECTION
      CRA SAND TRAP EQUIPMENT UPGRADES
```

```
Conveyance and Aqueduct Facilites
CRA SEISMIC EVALUATION - SWITCH HOUSE AND PUMP ANCHORAGE
  CRA SEISMIC UPGRADE OF 6.9KV SWITCH HOUSES
CRA SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION
CRA SERVICE CONNECTION DWCV-4 VALVES REPLACEMENT
  CRA SIPHON REHAB
  CRA SIPHONS. TRANSITIONS. CANALS. AND TUNNELS REHABILITATION AND IMPROVEMENTS
  CRA SWITCHRACKS & ANCILLARY STRUCTURES EROSION CONTROL
CRA TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT
  CRA TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT
CRA VILLAGES DOMESTIC WATER MAIN DISTRIBUTION REPLACEMENT STUDY
 CUF DECHLORINATION SYSTEM
DAM SLUICEWAYS AND OUTLETS REHABILITATION
DAM SLUICEWAYS AND OUTLETS REHABILITATION
DANBY TOWER FOOTER REPLACEMENT
DANBY TOWERS FOUNDATION REHABILITATION
DESERT FACILITIES FIRE PROTECTION SYSTEMS UPGRADE
DESERT LAND ACQUISITIONS
DESERT JUMP PLANT OIL CONTAINMENT
DESERT ROADWAY IMPROVEMENT
DESERT SEPTIC SYSTEM
DESERT SEPTIC SYSTEM
DESERT SEPTIC SYSTEM DELIABILITATION
DESERT SEPTIC SYSTEM
DESERT SEPTIC SYSTEM REHABILITATION
DESERT WATER SYSTEM REHABILITATION
DESERT WATER SYSTEM REHABILITATION
DISCHARGE LINE ISOLATION BULKHEAD COUPLINGS
DISTRIBUTION SYSTEM FACILITIES - REHABILITATION PROGRAM
DISTRIBUTION SYSTEM FACILITIES REHABILITATION PROGRAM - MAINTENANCE & STORAGE SHOP (PC-1)
DISTRIBUTION SYSTEM RELIABILITY PROGRAM - PHASE 2
DVL INLET / OUTLET TOWER FISH SCREENS REPLACEMENT
DVL TO SKINNER TRANSMISSION LINE STUDY
E. THORNTON IBBETSON GUEST QUARTERS
EAGLE AND HINDS EQUIPMENT WASH AREA UPGRADE
EAGLE KITCHEN UPGRADE
EAGLE KITCHEN UPGRADE
EAGLE MOUNTAIN PUMPING PLANT SCADA SYSTEM
 EAGLE MOUNTAIN PUMPING PLANT SCADA SYSTEM EAGLE MOUNTAIN SAND TRAPS STUDY
 EAGLE MOUNTAIN SHID INAPS STIDUY
EAGLE MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY
EAGLE MTN SAND TRAPS STUDY
EAGLE ROCK ASPHALT REPAIR PROJECT
EAGLE ROCK MAIN ROOF REPLACEMENT
EAGLE ROCK MAIN ROOF REPLACEMENT
ENHANCED VAPOR RECOVERY UPGRADES FOR GASOLINE DISPENSERS
ENVIRONMENTAL MITIGATION
ETIWANDA PIPELINE LINER REPAIR
ETIWANDA RESERVOIR LINER REPAIR
FUTURE SYSTEM RELIABILITY PROJECTS
GARVEY RESERVOIR - AUTOMATED DATA ACQUISITION SYSTEM
GARVEY RESEVOIR AUTOMATED DATA ACQUISITION SYSTEM REPLACEMENT
  GENE & INTAKE P.P. - FREQUENCY PROTECTION RELAY REPLACEMENT
GENE & INTAKE PUMPING PLANT SURGE CHAMBER OUTLET GATES RE-COATING
  GENE & INTAKE PUMPING PLANTS - REPLACE UNDER FREQUENCY PROTECTION RELAY GENE AIR CONDITION
  GENE CAMP STATION SERVICE TRANSFORMER REPLACEMENT
GENE PUMPING PLANT - AIR STRIP EXTENSION PROJECT
GENE PUMPING PLANT - HEAVY EQUIPMENT SERVICE PIT
 GENE PUMPING PLANT - HEAVY EQUIPMENT SERVICE PIT
GENE PUMPING PLANT - PEDDLER SUBSTATION REPLACEMENT
GENE PUMPING PLANT - SCADA SYSTEM
GENE PUMPING PLANT EXPANSION JOINT REHABILITATION
GENE PUMPING PLANT MAIN TRANSFORMER AREA
GENE PUMPING PLANT STANDBY GENERATOR REPLACEMENT
GENE STORAGE BUILDING REPLACEMENT
  GENE STORAGE WAREHOUSE REPLACEMENT
HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB
HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB.
HIGHLAND PIPELINE CONSTRUCTION
HINDS EAGLE & IRON MOUNTAINS STORAGE BUILDINGS
HINDS PUMPING PLANT EQUIPMENT WASH AREA UPGRADES
HINDS PUMPING PLANT SCADA SYSTEM
HINDS PUMPING PLANT STANDBY GENERATOR REPLACEMENT
INLAND FDR, ARROWHEAD TUNNELS REDESIGN
INLAND FDR, ARROWHEAD WEST TUNNEL CONSTRUCTION
INLAND FOR ARROWHEAD WEST TUNNEL CONSTRUCTION
  INLAND FDR, CONTRACT 9, CONSTRUCTION OF RIVERSIDE PPLN SOUTH INLAND FDR, OWNER CONTROLLED INSURANCE PROGRAM
 INLAND FDR, REACH 4, RUSD PPLN
INLAND FDR, REACH 4, RUSD PPLN
INLAND FDR-CNTR #1/DEVIL CYN-WATERMAN RD
INLAND FDR-CNTR #4-SOFT GRND TNL/SANTA ANA
INLAND FDR-CONT #8-PIPEL PARALLEL TO DAVIS RD
 INLAND FDR-ENVIRON. MITIG.
INLAND FEEDER - RIGHT OF WAY AND EASEMENT PROCUREMENT
INLAND FEEDER CONTINGENCY
INLAND FEEDER CONTINGENCY
INLAND FEEDER COST OF LAND AND RIGHT OF WAY
INLAND FEEDER ENVIRONMENTAL MITIGATION
INLAND FEEDER GROUNDWATER MONITORING
INLAND FEEDER HIGHLAND PIPELINE CLAIMS COST
INLAND FEEDER HIGHLAND PIPELINE CONSTRUCTION
INLAND FEEDER HIGHLAND PIPELINE DESIGN
INLAND FEEDER MENTONE PIPELINE CONSTRUCTION
INLAND FEEDER MENTONE PIPELINE DESIGN
INLAND FEEDER MENTONE PIPELINE DESIGN
INLAND FEEDER MENTONE PIPELINE DUSTONSTRUCTION
INLAND FEEDER MENTONE PIPELINE RUSD CONSTRUCTION
INLAND FEEDER MENTONE PIPELINE RUSD CONSTRUCTION
INLAND FEEDER PROGRAM REMAINING BUDGET/CONTINGENCY
INLAND FEEDER PROGRAM REMAINING BUDGET/CONTINGENCY
INLAND FEEDER PROGRAM REMAINING BUDGET/CONTINGENCY
INLAND FEEDER PROGREM MEMOREMENT SUPPORT
  INLAND FEEDER PROJECT MANAGEMENT SUPPORT
INLAND FEEDER PURCHASE OF LAND AND RIGHT OF WAY
  INLAND FEEDER RAISE BURIED STRUCTURES AND REALIGN DAVIS RD. INLAND FEEDER REVERSE OSMOSIS PLANT
  INLAND FEEDER RIVERSIDE BADLANDS TUNNEL CONSTRUCTION INLAND FEEDER RIVERSIDE NORTH PIPELINE DESIGN
 INLAND FEEDER RUSD CLAIMS DEFENSE
INLAND FEEDER STUDIES
  INLAND FEEDER UNDERGROUND STORAGE TANK REMOVAL & ABOVEGROUND STORAGE TANK INSTALLATION
  INLAND FEEDER, ARROWHEAD EAST TUNNEL
  INLAND FEEDER, ARROWHEAD TUNNELS CONSTRUCTION
  INLAND FEEDER, CONTRACT #5, OPAL AVENUE PORTAL / BADLANDS TUNNEL
```

```
Conveyance and Aqueduct Facilites
INLAND FEEDER, CONTRACT #7, RIVERSIDE NORTH PIPELINE CONSTRUCTION
INLAND FEEDER, PROGRAM MANAGEMENT
INLAND FEEDER, SBMWD HIGHLAND INTERTIE BYPASS LINE REHAB
INLAND FEEDER/SBMWD HIGHLAND IN IER HE BYPASS LINE REHAB
INSULATION JOINT TEST STATIONS
INTAKE POWER AND COMMUNICATIONS LINE RELOCATION
INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT
INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU
INTAKE PUMPING PLANT AUTOMATION PROGRAMMING
INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT
INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT
INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION
INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION (4 PLANTS)
INTAKE PUMPING PLANT POWER & COMMUNICATION LINE REPLACEMENT
INTAKE PUMPING PLANT POWER & COMMUNICATION LINE REPLACE
INTAKE PUMPING PLANT SCADA SYSTEM
INTAKE PUMPING PLANT STANDBY GENERATOR REPLACEMENT
IRON MOUNTAIN GENERATOR REPLACEMENT
IRON MOUNTAIN PUMPING PLANT
IRON MOUNTAIN PUMPING PLANT DELIVERY LINE NO. 1 RELINING
IRON MOUNTAIN PUMPING PLANT HOUSING REPLACEMENT
IRON MOUNTAIN PUMPING PLANT SCADA SYSTEM
IRON MOUNTAIN SERVICE PIT REHABILITATION
JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE 2 REPAIRS
JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE I REPAIR
LAKE MATHEWS FOREBAY & HEADWORK FACILITY & EQUIPMENT
LAKE MATHEWS FOREBAY WALKWAY REPAIRS
LAKE MATHEWS ICS
LAKE MATHEWS ICS

LAKE MATHEWS INTERIM CHLORINATION SYSTEM

LAKE SKINNER - OUTLET CONDUIT FLOWMETER INSTALLATION

LAKE SKINNER BYPASS PIPELINE NO. 2 CATHODIC PROTECTION

LAKE SKINNER OUTLET CONDUIT

LAKEVIEW PIPELINE LEAK REPAIR AT STA. 2510+49

LAVERNE FACILITIES - EMERGENCY GENERATOR

LAVERNE FACILITIES - MATERIAL TESTING
LAVERNE FACILITIES - MATERIAL TESTING
LOWER FEEDER EROSION PROTECTION
MAGAZINE CANYON - VALVE REPLACEMENT FOR SAN FERNADO TUNNEL (STATION 778+80)
MAGAZINE CANYON OIL & WATER SEPARATOR
MAGAZINE CANYON OILWATER SEPARATOR
MAGAZINE CANYON OIL/WATER SEPARATOR
MAPES LAND ACQUISTION
MENTONE PPLN, RUSD, DEFENSE OF CLAIM
MILE 12 FLOW AND CHLORINE MONITORING STATION UPGRADES
MILE 12 POWER LINE & FLOW MONITORING EQUIPMENT STUDY
MILLS PLANT SUPPLY PUMP STATION STUDY
MINOR CAP FY 2011/12
MOTOR BREAKER FAULTY (5 PPLANTS)
NEWHALL TUNNEL - REPAIR STEEL LINER
NEWHALL TUNNEL - UPGRADE LINER SYSTEM
NITROGEN STORAGE STUDY AT DVL, INLAND FEEDER PC-1, AND LAKE MATHEWS OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REPAIR
 OC 88 PUMP PLANT FIRE PROTECTION STUDY
OC-71 SERVICE CONNECTION REPAIRS
OLINDA PCS FACILITY REHABILITATION AND UPGRADE
OLINDA PCS FAULITY REHABILITATION AND UPGRADE
OLINDA PRESSURE CONTROL STRUCTURE FACILITY REHABILITATION AND UPGRADE
ORANGE COUNTY 44 SERVICE CONNECTIONS & ECOC#2 METER ACCESS ROAD REPAIR
ORANGE COUNTY 88 PUMP PLANT FIRE PROTECTION STUDY
OWNER CONTROLLED INSURANCE PROGRAM
 PALO VERDE VALLEY LAND PURCHASE - 16,000 ACRES
PALOS VERDES FEEDER REHABILITATION OF DOMINGUEZ CHANNEL
 PALOS VERDES RESERVOIR SPILLWAY MODIFICATION PROJECT MANAGEMENT SUPPORT
PUDDINGSTONE RADIAL GATE REHABILITATION
PURCHASE OF LAND AND RIGHT OF WAY
 QUAGGA MUSSEL STUDY
R&R FOR CRA
REPAIR UPPER FEEDER LEAKING EXPANDSION JOINT
REPAIRS TO TUNNELS
RIALTO FEEDER REPAIR @ STA. 3662+23
RIALTO FEEDER REPAIR OF ANOMALOUS PIPE SECTION RIVERSIDE BADLANDS TUNNEL CONSTRUCTION
RIVERSIDE BADLANDS TUNNEL CONSTRUCTION
RIVERSIDE BRANCH - ALESSANDRO BLVD. LEFT LAND TURN LANE
RIVERSIDE BRANCH - CONSTRUCTION OF CONTROL PANEL DISPLAY WALL
RIVERSIDE NORTH PIPELINE DESIGN & CONSTRUCTION
RIVERSIDE SOUTH PIPELINE CONSTRUCTION
SAN DIEGO PIPELINE REPAIR AT STATION 1268+57
SAN FERNANDO TUNNEL STATION 778+80 VALVE REPLACEMENT
SAN GABRIEL TOWER SEISMIC ASSESSMENT
SAN GABRIEL TOWER SLIDE GATE REHABILITATION
SAN JACINTO TUNNEL EAST ADIT REHABILITATION
SAN JACINTO TUNNEL LIVEST POPETAL
SAN JACINTO TUNNEL EAST ADIT REHABILITATION
SAN JACINTO TUNNEL, WEST PORTAL
SAN JOAQUIN RESERVOIR - NEW DESIGN
SAN JOAQUIN RESERVOIR IMPROVEMENT- FLOATING COVER
SAN JOAQUIN RESERVOIR IMPROVEMENTS
SAN JOAQUIN RESERVOIR IMPROVEMENTS STUDY
 SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE STUDY
 SANTA ANA RIVER BRIGDE SEISMIC RETROFIT
  SANTIAGO TOWER ACCESS ROAD UPGRADE
 SANTIAGO TOWER PATROL ROAD REPAIR
SD5 REPAIR
SECOND LOWER FEEDER CARBON FIBER REPAIRS
SECOND LOWER FEEDER STRAY CURRENT MITIGATION SYSTEMS REFURBISHMENT SECURITY FENCING AT OC-88 PUMPING PLANT
 SEISMIC EVALUATION OF CRA STRUCTURES
 SEISMIC PROGRAM
 SEISMIC PROGRAM
SEISMIC UPGRADE OF 11 FACILITIES OF THE CONVEYANCE & DISTRIBUTION SYSTEM
SEPULVEDA FEEDER CORROSION INTERFERENCE MITIGATION
SEPULVEDA FEEDER REPAIR AT STATION 1099
  SEPULVEDA FEEDER STRAY CURRENT MITIGATION SYSTEM REFURBISHMENT
 SERVICE CONNECTION & FOCE #2 METER ACCESS ROAD LIPGRADE & BETTERMENT
 SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STUCTURE CONSTRUCTION
```

Description

Description

Conveyance and Aqueduct Facilites

SKINNER BR - IMPROVE CABAZON RADIAL GATE FACILITY

SKINNER BR - IMPROVE CABAZON RADIAL GATE FACILITY

SKINNER FILTRATION PLANT HELIPAD UPGRADE

SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY

SWITCHYARDS AND HEAD GATES REHAB

TEMESCAL HYDRO-LECTRIC PLANT ACCESS ROAD UPGRADE

TEMESCAL HYDRO-LECTRIC PLANT ACCESS ROAD UPGRADE

TEMESCAL POWER PLANT ACCESS ROAD PAVING

TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT

TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT PROJECT

U.S. BUREAU OF LAND MANAGEMENT LAND ACQUISITION

UPPER FEEDER CATHODIC PROTECTION SYSTEM

UPPER FEEDER CATHODIC PROTECTION SYSTEM

UPPER FEEDER SCHEDULES 2S

VALLEY BRANCH - PIPELINE CORROSION TEST STATION

WEST VALLEY FEEDER #2 CATHODIC PROTECTION SYSTEM REHABILITATION

WEYMOUTH WATER STREATMENT PLANT - NORTH PERIMETER WALL

WHITE WATER SIPHON PROTECTION STRUCTURE

WHITEWATER SIPHON PROTECTION STRUCTURE

Sub-total Conveyance and Aqueduct facilities benefits

82,784,726

```
Distribution Facilites

104568 - SITE 3 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN
   42" CONICAL PLUG VALVE REPLACEMENT
ACCUSONIC FLOW METER UPGRADE
  ACCUSTIC FIBER OPTIC MONITORING OF PCCP LINES
ALAMEDA CORRIDOR PIPELINE
  ALL FACILITIES - WATER DISCHARGE ELIMINATION
ALL FACILITIES INSPECTION AND REPLACEMENT OF CRITICAL VACUUM VALVES
ALL FACILITIES, INSPECTION AND REPLACEMENT OF CRITICAL VACUUM VALVES
  ALL FEDERS - MANHOLE LOCKING DEVICE RETROFIT
ALL PUMPING PLANTS - INSTALL HYPOCHLORINATION STATIONS
ALLEN MCCOLLOCH PIPELINE 2010 REFURBISHMENT
ALLEN MCCOLLOCH PIPELINE CATHODIC PROTECTION
 ALLEN MCCOLLOCH PIPELINE CATHODIC PROTECTION
ALLEN MCCOLLOCH PIPELINE INTERCONNECTIONS
ALLEN MCCOLLOCH PIPELINE LOCAL CONTROL MODIFICATIONS
ALLEN MCCOLLOCH PIPELINE REPAIR
ALLEN MCCOLLOCH PIPELINE REPAIR - CARBON FIBER LINING REPAIR
ALLEN MCCOLLOCH PIPELINE REPAIR - SERVICE CONNECTIONS UPGRADES
ALLEN MCCOLLOCH PIPELINE REPAIR - STATION 276+63
ALLEN MCCOLLOCH PIPELINE REPAIR - SURGE SUPPRESSION SYSTEM AT OC88A
ALLEN MCCOLLOCH PIPELINE REPAIR - VALVE ACTUATOR REPLACEMENTS
ALLEN MCCOLLOCH PIPELINE REPAIR SERVICE CONNECTIONS SIMPLIFICATION
  ALLEN MCCOLLOCH PIPELINE STRUCTURE - ROOF SLAB REPAIRS
ALLEN MCCOLLOCH PIPELINE VALVE VAULT REPAIRS
  ALLEN-MCCOLLOCH CORROSION/INTERFERENCE MITIGATION, STATION 719+34 TO 1178+02 ALLEN-MCCOLLOCH PIPELINE
 ALLEN-MCCOLLOCH PIPELINE
ALLEN-MCCOLLOCH PIPELINE PCCP REHABILITATION
ALLEN-MCCOLLOCH PIPELINE REFURBISHMENT - STAGE 2
ALLEN-MCCOLLOCH PIPELINE VALVE AND SERVICE CONNECTION VAULT REPAIRS
AMP -SERVICE CONNECTIONS UPGRADES
AMP -VALVE ACTUATOR REPLACEMENTS
AMP COMPLETION RESOLUTION RIGHT OF WAY ISSUES
AMR - RTU UPGRADE - PHASE 2
AMR - RTU UPGRADE - PHASE 2
ANODE WELL REPLACEMENT FOR ORANGE COUNTY AND RIALTO FEEDERS
ARROW HIGHWAY PROPERTY DEVELOPMENT
ASPHALT REPAIRS TO PERIMETER OF SEPULVEDA PCS
ASSESS THE CONDITION OF METROPOLITAN'S PRESTRESSED CONCRETE CYLINDER PIPE
ASSESS THE CONDITIONS OF MET'S
ASSESS THE CONDITIONS OF MET'S
ASSESSMENT OF PRESTRESSED CONCRETE CYLINDER PIPELINES - PHASE 3
AULD VALLEY CONTROL STRUCTURE AREA FACILITIES
AUTOMATED RESERVOIR WATER QUALITY MONITORING
AUTOMATIC METER READING SYSTEM - PRU UPGRADE PHASE 2
AUTOMATIC METER READING SYSTEM UPGRADE
AUTOMATION COMMUNICATION UPGRADE
AUTOMATION DOCUMENTATION SURVEY FIA
  AUTOMATION DOCUMENTATION SURVEY F/A
BAR 97- ENHANCED AREA VEHICLE TESTING
  BATTERY MONITORING SYSTEM FOR AUTOMATIC METER READING SYSTEM BIXBY VALVE REPLACEMENT
BIXBY VALVE REPLACEMENT
BLACK METAL MOUNTAIN ELECTRICAL TRANSFORMER
BOX SPRINGS FEEDER BROKEN BACK REPAIR
BOX SPRINGS FEEDER BROKEN BACK REPAIR PHASE I
BOX SPRINGS FEEDER PHASE 3 AND 4 ENVIRONMENTAL MONITORING
BOX SPRINGS FEEDER REPAIR PHASE I
BUDGET ADJUSTMENT
BUDGET ADJUSTMENT
C&D CRANE INSTALLATION AT OC-88 PUMPING PLANT
CAJALCO CREEK DAM MANHOLE COVER RETROFIT
CAJALCO CREEK DETENTION DAM SPILLWAY ACCESS ROAD
CALABASAS FEEDER CARBON FIBER 'RBOKEN BACK REPAIR
CALABASAS FEEDER REPAIR CELLABASAS FEEDER REPAIR CALABASAS FEEDER REPAIR CALABASAS FEEDER REPAIR STUDY
CALABASAS FEEDER REPAIR, STUDY
CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 
 CATHODIC PROTECTION SYSTEM UPGRADES
CCP-PHASE 2 CONSTRUCTION
CDSRP - DISCHARGE ELIMINATION
CDSRP - ENTRAINED AIR IN UPPER FEEDER PIPELINE STUDY
CDSRP - SEPULVEDA FEEDER REPAIRS
CDSRP - SEPULVEDA TANKS RECOATING
CENTRAL POOL AUGMENTATION - TUNNEL AND PIPELINE & RIGHT-OF-WAY ACQUISITION
CENTRAL POOL AUGMENTATION (CPA) PROGRAM - PIPELINE AND TUNNEL ALIGNMENT
   CENTRAL POOL AUGMENTATION AND WATER QUALITY PROJECT (CPAWQP)
CHEMICAL INVENTORY AND USAGE REWRITE AND ELECTRICAL. SYSTEM LOG
   CHEMICAL UNLOADING FACILITY RETROFIT
CHEVALIER FALCON MILLING MACHINE
  COASTAL JUNCTION REVERSE FLOW BYPASS
COASTAL PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT
   COLLIS VALVE REPLACEMENT
  COMMUNICATIONS STRUCTURE ALARM MONITORING
COMPREHENSIVE INFORMATION SECURITY ASSESSMENT PHASE III
  CONSTRUCTION PHASE 2
CONTRACT & LITIGATION TASKS -CONTRACT # 1396
   CONTROL SYSTEM DATA STORAGE AND REPORTING
CONTROL SYSTEM DRAWING & DOCUMENTATION UPDATE
  CONTROL SYSTEM DRAWING & DUCUMENTATION UPDATE
CONTROL SYSTEM ENHANCEMENT PROGRAM (CSEP) - DIGITAL SUBNET STANDARDIZATION
CONTROL SYSTEMS AUTOMATION COMMUNICATION UPGRADE
CONTROLS COMMUNICATIONS FRAME RELAY CONVERSION - APPROPRIATED
CONVERSION OF DEFORMATION SURVEY MONITORING AT GENE WASH, COPPER BASIN, AND DIEMER BASIN 8
CONVEYANCE AND DISTRIBUTION SYSTEM REHABILITATION PROGRAM (CDSRP) - CURRENT DRAIN STATIONS
COPPER BASIN ICS
    COPPER BASIN SEWER SYSTEM
    CORONA POWER PLANT REPLACE EMERGENCY GENERATOR
CORROSION MATERIALS TESTING FACILITY SCADA UPGRADE
     COVINA PRESSURECONTROL FACILITY
```

```
Description
Distribution Facilites
COYOTE CREEK NORTHERN PERIMETER LANDSCAPING
COYOTE CREEK NORTHERN PERIMETER LANDSCAPING
COYOTE PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT
CPA PIPELINE & TUNNEL ALIGNMENT - NON FUNDED PORTION
CPA PIPELINE & TUNNEL ALIGNMENT - STUDY
CPA WATER TREATMENT PLANT - NON FUNDED PORTION
CPA WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2
CPA WATER TREATMENT PLANT - STUDY
CPA WATER TREATMENT PLANT - STUDY

CPAWOP - PHASE 2

CPAWOP - STUDY AND LAND ACQUISITION - CONTINGENCY

CPAWOP - STUDY AND LAND ACQUISITION - PIPELINE & TUNNEL ALIGNMENT - STUDY

CPAWOP - STUDY AND LAND ACQUISITION - RIGHT-OF-WAY-ACQUISITION

CPAWOP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2

CPAWOP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - STUDY

CRA - PC-1 EFFLUENT OPEN CHANNEL TRASH RACK

CRA - CABAZON & POTRERO SHAFT COVERS
 CRA CONTROL INTEGRATION
CRA PROTECTIVE SLAB AT STATION 9704+77
CROSS CONNECTION PREVENTION PROGRAM - PHASE II CONSTRUCTION
CROSS CONNECTION PREVENTION PROJECT, COMPLETE PRELIMINARY DESIGN AND CEQA DOCUMENTATION CSEP - ELECTRONIC SYSTEM LOG (ESL)
CSEP - ENERGY MANAGEMENT SYSTEM PHASE II
CSEP - ENHANCED DISTRIBUTION SYSTEM CONTROL PROJECT
 CSEP - IMPLEMENTATION
CSEP - OPERATIONS & BUSINESS DATA INTEGRATION PILOT
CSEP - OPERATIONS & BUSINESS DATA INTEGRATION PILOT
CSEP - PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING
CSEP - PLC PHASE 2 - LIFE-CYCLE REPLACEMENT
CSEP - PLC STANDARDIZATION
CSEP - PLC STANDARDIZATION PHASE II
CSEP - POWER MANAGEMENT SYSTEM
 CSEP - WATER PLANNING APPLICATION
CSEP IMPLEMENTATION
 CSEP- SMART OPS (FORMERLY REAL TIME OPERATIONS SIMULATION)
CURRENT DRAIN STATIONS
CURRENT DRAIN STATIONS

DAM REHABILITATION & SAFETY IMPROVEMENTS ST. JOHN'S CANYON CHANNEL EROSION MITIGATION
DANBY TOWER FOUNDATION INVESTIGATION AND SHORT TERM MITIGATION
DEODERA PCS PAVEMENT UPGRADE & BETTERMENT
DESERT BRANCH - REPLACE STOLEN COPPER GROUND WIRE FOOTINGS/GROUNDING, AND COPPER PIPING
DESERT BRANCH - PUMP PLANT AUXILIARY (STATION SERVICE)
DESERT BRANCH, PURCHASE & INSTALL 5 PORT VIDEO CONFERENCING
DESERT FACILITIES DOMESTIC WATER GAC SYSTEM INSTALLATION
DESERT HIGH VOLTAGE TRANSMISSION TOWERS - REPLACE COPPER GROUND WIRES ON
DETAIL SEISMIC EVALUATION OF WATER STORAGE TANK
DEP. JEI MINIATE BACKLIP GENERATOR TIER, IS & INSTALL MANUAL TRANSFER SWITCH FOR CHI ORINE SCRI
DEFAL SEISMINATE BACKUP GENERATOR TIE-BUS & INSTALL MANUAL TRANSFER SWITCH FOR CHLORINE SCRUBBER DIEMER FILTRATION PLANT - SLOPE REPAIR DIEMER IRRIGATION RAW WATER CONVERSION TO INDUSTRIAL WATER DISCHARGE ELIMINATION
DISCHARGE ELIMINATION
DIST SYS-AIR RELEASE & VAC VALVE MODS
DISTRIBUTION SYSTEM - CCPP CONSTRUCTION PACKAGES 9,11,12
DISTRIBUTION SYSTEM - STANDPIPE STRENGTHENING PROGRAM
DISTRIBUTION SYSTEM - STANDPIPE STRENGTHENING PROGRAM
DISTRIBUTION SYSTEM - STATIONARY CORROSION REFERENCE
DISTRIBUTION SYSTEM - TREATED WATER CROSS CONNECTION PREVENTION PROJECT - FINAL DESIGN & CONSTRUCTION
DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF LOS ANGELES COUNTY
DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF RIVERSIDE AND SAN DIEGO COUNTY
DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF RIVERSIDE AND SAN DIEGO COUNTY
DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF SAN REPNIABRINING COI INTY
DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF SAN BERNARDINO COUNTY
DISTRIBUTION SYSTEM CONTROL & EQUIP UPGRADE - ENHANCED DISTRIB. SYSTEM AUTOMATION PHASE I
DISTRIBUTION SYSTEM CONTROL & EQUIP UPGRADE - ENHANCED DISTRIB. SYSTEM AUTOMATION PHASE I DISTRIBUTION SYSTEM EQUIPMENT & INSTRUMENTATION UPGRADES INSTRIBUTION SYSTEM INFRASTRUCTURE PROTECTION IMPROVEMENTS FOR ORANGE COUNTY DISTRIBUTION SYSTEM REHABILITATION PROGRAM - ASSESS THE STATE OF MWD'S DISTRIBUTION SYSTEM DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS - WILLOWGLEN RTUS ADMINISTRATION DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS (DSRACS) DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS (DSRACS) DISTRICT WIDE - ENHANCED VAPOR RECOVERY PHASE 2 GASOLINE DISPENSING DSRACS - OPERATIONS CONTROL CENTER - CONTRACT #1396
DSRACS - SKINNER AREA
DSRACS - SOFTWARE DEVELOPMENT COST
DSRACS - WEYMOUTH
DVL & CONTROL SYSTEM REPLACEMENT INVESTIGATION & PREPARATION FOR PRELIMINARY DESIGN
DVL & CONTROL STSTEM REPLACEMENT INVESTIGATION & PREPARATION FOR PRELIMINARY DESIGN
EAGLE EQUIPMENT WASH AREA UPGRADE
EAGLE ROCK - ASPHALT REHABILITATION
EAGLE ROCK - FIRE PROTECTION AT THE WESTERN AREA OF THE EAGLE ROCK CONTROL CENTER PERIMETER GROUNDS
EAGLE ROCK CONTROL CENTER FIREHYDRANT
EAGLE ROCK CANINGL CENTER FIRETURANT
EAGLE ROCK LATERAL INTERCONNECTION REPAIR
EAGLE ROCK MAIN BUILDING ROOF REPLACEMENT - STUDY
EAGLE ROCK OPERATIONS CONTROL CENTER
EAGLE ROCK OPERATIONS CONTROL CENTER
EAGLE ROCK RESIDENCE CONVERSION
EAGLE ROCK TOWER AND PUDDINGSTONE SPILLWAY GATES REHABILITATION EAGLE ROCK TOWER SLIDEGATE REHABILITATION
EAGLE ROCK TOWER SLIDEGATE REHABILITATION
EAST INFLUENT CHANNEL REPAIR PROJECT
EAST ORANGE COUNTY FEEDER #2 REPAIR
EASTERN AND DESERT REGIONS PLUMBING RETROFIT
EASTERN REGION PCCP JOINT MODIFICATION 2012
E-DISCOVERY STORAGE MANAGEMENT SYSTEM UPGRADE
ELECTRIC CURRENT DRAIN STATION INSTALLATIONS
ELECTROMAGNETIC INSPECTION OF PCCP LINES
ELECTROMIC SYSTEM LOC (451)
ELECTRONIC SYSTEM LOG (ESL)
ENERGY MANAGEMENT SYSTEM - PHASE 2
ENERGY MANAGEMENT SYSTEM - PHASE 2
ENHANCED DISTRIBUTION SYSTEM AUTOMATIC FLOW TRANSFERS SOFTWARE REDEVELOPMENT
ENHANCED DISTRIBUTION SYSTEM AUTOMATION PHASE I
ENHANCED DISTRIBUTION SYSTEM AUTOMATION PHASE II
EQUIPMENT UPGRADE AT THE NORTH PORTAL OF THE HOLLYWOOD TUNNEL
ETIWANDA / RIALTO PIPELINE INTER-TIE CATHODIC PROTECTION
ETIWANDA CAVITATION FACILITY INFRASTRUCTURE REHABILITATION
ETIWANDA CAVITATION TEST FACILITY COMMUNICATION AND CONTROL SYSTEM REPLACEMENT
    TIWANDA HEP NEEDLE VALVE OPERATORS
ETIWANDA PIPELINE - LINING REPLACEMENT
ETIWANDA PIPELINE AND CONTROL FACILITY - RIGHT OF WAY
```

```
DISTRIBUTION
DISTRIBUTION
DISTRIBUTION
DISTRIBUTION
DISTRIBUTION
DISTRIBUTION
ETIWANDA PIPELINE AND CONTROL FACILITY - AS BUILTS
ETIWANDA PIPELINE AND CONTROL FACILITY - CATHODIC PROTECTION
ETIWANDA PIPELINE AND CONTROL FACILITY - LANDSCAPING AND IRRIGATION
ETIWANDA PIPELINE AND CONTROL FACILITY - LANDSCAPING AND IRRIGATION
ETIWANDA PIPELINE AND CONTROL FACILITY - RIALTO FEEDER TO UPPER PIPELINE
ETIWANDA RESERVOIR - EXTEND OUTLET STRUCTURE
FACILITY AND PROCESS RELIABILITY ASSESSMENT
ELL TED ISOLATION CATE AND BACKWASH CONTROL WEIR COVERS MODILIES 1.6
FACILITY AND PROCESS RELIABILITY ASSESSMENT
FILTER ISOLATION GATE AND BACKWASH CONTROL WEIR COVERS MODULES 1-6
FLOWMETER MODIFICATION - LAKE SKINNER INLET, ETIWANDA EFFLUENT & WADSWORTH CROSS CHANNEL
FOOTHILL & SEPULVEDA FEEDER PCCP CARBON FIBER JOINT REPAIRS
FOOTHILL FEEDER ADEN AVE. REHABILITATION
FOOTHILL FEEDER CARBON FIBER REPAIR
FOOTHILL FEEDER CATHODIC PROTECTION
FOOTHILL FEEDER PEPLINE REPLACEMENT PROJECT
FOOTHILL FEEDER POWER PLANT EXPANSION
FOOTHILL FEEDER REPAIR @ SANTA CLARITA RIVER
FOOTHILL FEEDER, CARBON FIBER REPAIRS
FOOTHILL HYDROELECTRIC RUNNER REPLACEMENT
FOOTHILL HYDROELECTRIC RUNNER REPLACEMENT
FOOTHILL PCS. LININTERRI IPTIBL IP POWER SOURCE SYSTEMS INSTALLATION
   FOOTHILL PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION FOOTHILL PCS FLOOD PUMP INSTALLATION DESIGN DOCUMENTATION
 FOOTHILL PCS INTERNAL VALVE LINERS UPGRADE
FUTURE SYSTEM RELIABILITY PROGRAM
 GARVEY RESERVOIR - HYPOCHLORITE FEED SYSTEM
GARVEY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS
 GARVEY RESERVOIR - LOWER ACCESS PAVING ROAD & DRAINS
GARVEY RESERVOIR HYPOCLORITE FEED SYSTEM
GARVEY RESERVOIR SITE DRAINAGE REPAIRS AND MODIFICATIONS
 GENE & IRON POOLS
GENE AIR CONDITIONING SYSTEM REPLACEMENT
 GENE MESS HALL AIR CONDITIONING UNIT
GENE SPARE PARTS WAREHOUSE IMPROVEMENTS
 GENDALE 01 SERVICE CONNECTION REHAB
GLENDALE 01 SERVICE CONNECTION REHAB
GLENDALE-01 SERVICE CONNECTION REHABILITATION AND UPGRADE
GREG AVE PCS FACILITY REHABILITATION
GREG AVENUE CONTROL STRUCTURE VALVE REPLACEMENT
 GREG AVENUE PCS CONTROL BUILDING INTERIOR REHABILITATION HINDS GARAGE ASBESTOS SHEETING REPLACEMENT HVAC MODIFICATIONS FOR ELECTRICAL SAFETY AND RELIABILITY
 HYDRAULIC MODELING PROJECT
HYDROELECTRIC PLANT CARBON DIOXIDE (CO2) FIRE SUPPRESSION SYSTEM MODIFICATIONS
 HTURGELECTRIC PLANT CARBON DIOXIDE (CO2)
IAS PROJECTS - CPU
IAS PROJECTS - DVL-SKINNER
IAS PROJECTS - MILLS SUPPLY RELIABILITY
INLAND PCSUST REMOVAL & AST INSTALLATION
 INSTALL MOTION SENSORS IN NEW EXPANSION INSTALL TEST LEADS AT FOUR LOCATIONS
INSTALL MOTION SENSORS IN NEW EXPANSION
INSTALL TEST LEADS AT FOUR LOCATIONS
INSULATION JOINT TEST STATIONS
INTAKE PUMPING PLANT - UNDER FREQUENCY PROTECTION RELAY UPGRADE
IRON MOUNTAIN - TRANSFORMER OIL TANK RELOCATION
JENSEN DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT # 1396
JENSEN FILTRATION PLANT - REPLACE ADMINISTRATION BUILDING AIR CONDITIONING
JENSEN FILTRATION PLANT - ROAD RECONSTRUCTION
JENSEN FILTRATION PLANT - SANDBLASTING BOOTH PURCHASE & INSTALLATION
JENSEN FILTRATION PLANT - TRAVELING BRIDGE RETROFIT MODULE 2 & 3
LA VERNE FACILITIES - BRIDGEPORT E-2-PATH
LA VERNE FACILITIES - ENERGY CONSERVATION ECM1 - 10
LA VERNE FACILITIES - ENERGY CONSERVATION ECM1 - 10
LA VERNE FACILITIES - HAZARDOUS WASTE STORAGE
LA VERNE FACILITIES - MAIN TRANSFORMERS REPLACEMENT
LA VERNE FACILITIES - MAIN TRANSFORMERS REPLACEMENT
LA VERNE FACILITIES - MAIN TRANSFORMERS REPLACEMENT
LA VERNE FACILITIES - MATERIALS TESTING LABORATORY
LA VERNE FACILITIES - MERCHANT OF FLOCCULATOR STUB SHAFT - BASINS 1 & 2
LA VERNE MACHINE SHOP - AIR CONDITIONING UNIT REPLACEMENT
LA VERNE MACHINE SHOP - REPAIR HORIZONTAL BORING MILL
LA-35 DISSCHARGE STRUCTURE REPAIRS
LAKE MATHEWS - CONSTRUCTION OF BACKUP COMPUTER FACILITIES
  LAKE MATHEWS - CONSTRUCTION OF BACKUP COMPUTER FACILITIES LAKE MATHEWS - DIVERSION TUNNEL WALKWAY REPAIR
  LAKE MATHEWS - FACILITY WIDE EMERGENCY WARNING AND PAGING SYSTEM 
LAKE MATHEWS - FOREBAY MCC ROOF IMPROVEMENT 
LAKE MATHEWS - MAIN DAM TOE SEEPAGE COLLECTION
 LAKE MATHEWS - MAIN DAM TOE SEEPAGE COLLECTION
LAKE MATHEWS - MULTIPLE SPECIES MANAGER'S OFFICE & RESIDENCE
LAKE MATHEWS - RENOVATION OF BLOGS. 8 & 15, GENERAL ASSEMBLY & ADMIN. BLDG. OFFICE AREAS
LAKE MATHEWS - RETROFIT LOWER ENTRANCE GATE SWING ARM
LAKE MATHEWS FOREBAY MCC ROOF IMPROVEMENT
LAKE MATHEWS MAIN DAM TOE SEEPAGE COLLECTION
LAKE MATHEWS RETROFIT LOWER ENTRANCE GATE SWING ARM
 LAKE MAI HEWS RETROFIT LOWER ENTRANCE GATE SWING ARM
LAKE PERRIS BYPASS PIPELINE EXPLORATION
LAKE PERRIS EMERGENCY STANDBY GENERATOR AND TRANSFER SWITCH REPLACEMENT
LAKE SKINNER - AERATOR AIR COMPRESSOR REPLACEMENT
LAKE SKINNER - OUTLET TOWER VALVE REHABILITATION
LAKE SKINNER - REPLACEMENT AERATOR RING
 LAKE SKINNER AERATOR AIR COMPRESSOR REPLACEMENT
LAKE SKINNER AERATOR AIR COMPRESSOR REPLACEMENT
LAKE SKINNER DAM ROAD REHAB
LAKE SKINNER EAST BYPASS SCREENING STRUCTURES
LAKE SKINNER OUTLET TOWER CHLORINE SYSTEM MODIFICATION
LAKE SKINNER WEST BYPASS SCREENING STRUCTURE
LAKE SKINNER WEST BYPASS SCREENING STRUCTURE REHABILITATION
 LAKE SKINNER WEST BYPASS SCREENING STRUCTURE RE 
LAKE VIEW PIPE LINE REPAIRS 
LAKEVIEW PIPELINE - REPLACE VACUUM/AIR RELEASE 
LAKEVIEW PIPELINE CATHODIC PROTECTION SYSTEM 
LOWER FEEDER - CATHODIC PROTECTION 
LOWER FEEDER WR 33 - AREA REPAIR AND REMEDIATION 
MAGAZINE CANYON CANOPY 
MAGAZINE CANYON CANOPY 
MAGRELAND ACQUISITION GATE JACKING FRAME
 MAPES LAND ACQUISTION
MICROWAVE COMMUNICATION SITES BUILDING UPGRADE
  MIDDLE CROSS FEEDER CATHODIC PROTECTION
```

```
Description
 Distribution Facilites
MIDDLE FEEDER - CATHODIC PROTECTION SYSTEMS
 MIDDLE FEEDER - NORTH CATHODIC PROTECTION SYSTEM
MIDDLE FEEDER NORTH CATHODIC PROTECTION SYSTEM
MILLS FILTRATION PLANT - INVESTIGATION TO RELOCATE ACCESS ROAD
  MINOR CAP 08/09 PLACEHOLDER
 MINOR CAP FY 2009/10
MINOR CAP FY 2012/13
MINOR CAP FY 2014/16
 MINOR CAPITAL PROJECTS PROGRAM 07/08 - REMAINING FUNDS MOUNT OLYMPUS TUNNEL COST RIGHT-OF-WAY (ROW)
 MWD ROAD GUARDRAIL
NITROGEN STORAGE COMPLIANCE AT DVL, INLAND FEEDER PCS, AND LAKE MATHEWS
 NITROGEN STORAGE COMPLIANCE AT DVL, INLAND FEEDER P
NITROGEN STORAGE STUDY
NON PCCP LINES CONDITION INSPECTION AND ASSESSMENT
NORTH PORTAL OF HOLLYWOOD TUNNEL
NORTH REACH CONSTRUCTION / INSPECTION / CM
NORTH REACH CONSTRUCTION/ASBUILT
NORTH REACH ENVIRONMENTAL - CONSTRUCTION
 NORTH REACH FINAL DESIGN & ADV/NTP
NORTH REACH POST DESIGN / ASBUILT
NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION
 NORTHERN PIPELINE ENVIRONMENTAL FINAL DESIGN
NORTHERN PIPELINE RIGHT OF WAY FINAL DESIGN
 OAK ST. PCS ROOF REPLACEMENT
OAK STREET PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT - CONSTRUCTION
 OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REHAB
OC FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS
OC RESERVOIR SODIUM HYPOCHLORITE PUMP AND PIPING REPLACEMENT
 OC RESERVOIR SOLIUM RYPOCHLORITE PUMP AND PIPING R

0C-71 FLOW CONTROL FACILITY

OC-88 - SECURITY FENCING AT PUMP PLANT

OC-88 EMERGENCY STANDBY GENERATOR UPGRADE STUDY

OC-88 PUMP PLANT AIR COMPRESSOR UPGRADE
 OC-88 PUMP STATION FLOW METER UPGRADE
OC-88 PUMPING PLANT SURGE TANKS UPGRADES
 OLINDA PCS AND SANTIAGO TOWER EMERGENCY GENERATORS OLINDA PRESSURE CONTROL STRUCTURE
OLINDA PRESSURE CONTROL STRUCTURE
ON-CALL RESOURCES MANAGEMENT APPLICATION
OPERATIONS CONTROL CENTER AT EAGLE ROCK
OPERATIONS CONTROL CENTER UPS REPLACEMENT
OPERATIONS SCOPING STUDY
ORANGE CO FDR, BLOW-OFF STRUCTURE AND ACCESS ROAD REPAIR
ORANGE COUNTY - 88 PUMP PLANT AIR COMPRESSOR UPGRADE
ORANGE COUNTY - 88 SECURITY FENCING AT PUMP PLANT
 ORANGE COUNTY C & D ELECTRICAL IMPROVEMENTS - STUDY
ORANGE COUNTY C & D ELECTRICAL IMPROVEMENTS - STUDY
ORANGE COUNTY CAD INSTRUMENTATION PANEL IMPROVEMENTS
ORANGE COUNTY CONVEYANCE AND DISTRIBUTION SERVICE CENTER
ORANGE COUNTY FEEDER CATHODIC PROTECTION
ORANGE COUNTY FEEDER CATHODIC PROTECTION
ORANGE COUNTY FEEDER EXTENSION LINING REPAIR
ORANGE COUNTY FEEDER INSPECTION
ORANGE COUNTY FEEDER INTERNAL INSPECTION STUDY
ORANGE COUNTY FEEDER LINING REPAIR
ORANGE COUNTY FEEDER PRESSURE CONTROL STRUCTURES
ORANGE COUNTY FEEDER RELOCATION IN FULLERTON
ORANGE COUNTY FEEDER SCHEDULE 37SC CATHODIC PROTECTION
ORANGE COUNTY FEEDER SCHEDULE 37SC CATHODIC PROTECTION
ORANGE COUNTY FEEDER SCHEDULE 37SC CATHODIC PROTECTION
ORANGE COUNTY FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS
ORANGE COUNTY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS
ORANGE COUNTY RESERVOIR - PIEZOMETERS & SEEPAGE MONITORING AUTOMATION
OXIDATION DEMONSTRATION PLANT CONTROL SYSTEM REPLACEMENT
PALOS ALTOS FEEDER - 108TH ST.
PALOS VERDES FEEDER PCS - VALVE REPLACEMENT
PALOS VERDES RESERVOIR - INSTALL HYPOCHLORINATION STATIONS
PC-1 EFFLUENT OPEN CHANNEL TRASH RACK
 PCCP HYDRAULIC ANALYSES
PERIMETER FENCING AT PLACERITA CREEK
 PERMANENT LEAK DETECTION/PIPELINE MONITORING SYSTEM PERRIS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION
PERRIS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTAL PERRIS PCS ROOF REHAB PERRIS PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT PERRIS PUMPBACK COVER PERRIS PUMPBACK COVER PERRIS VALLEY PIPELINE - DESIGN-BUILD (EMWD) PERRIS VALLEY PIPELINE - GENERAL PERRIS VALLEY PIPELINE - NORTH REACH PERRIS VALLEY PIPELINE - SOUTH REACH PERRIS VALLEY PIPELINE - SOUTH REACH PERRIS VALLEY PIPELINE - STUDY PERRIS VALLEY PIPELINE - STUDY PERRIS VALLEY PIPELINE - TIE-IN (WMWD) PERRIS VALLEY PIPELINE - VALVES PERRIS VALLEY PIPELINE ORTH REACH PERRIS VALLEY PIPELINE NORTH REACH PERRIS VALLEY PIPELINE NORTH REACH PERRIS VALLEY PIPELINE NORTH REACH PERRIS VALLEY PIPELINE TIE-IN (WMWD) PERRIS VALLEY PIPELINE TIE-IN (WMWD)
 PERRIS VALLEY PIPELINE VALVES
PLACENTIA RAILROAD LOWERING PROJECT
PLACERITA CREEK PERIMETER FENCING
PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING
PLC REPLACEMENT PHASE II
 PRESTRESSED CONCRETE CYLINDER PIPE - PHASE 2
PRESTRESSED CONCRETE CYLINDER PIPE - PHASE 3
   PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF ORANGE COUNTY 
PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF SAN BERNARDINO COUNTY
  PROGRAMMABLE LOGIC CONTROLLER (PLC) STANDARDIZATION PUDDINGSTONE SPILLWAY CROSS CONNECTION PV RESERVOIR HYPOCHLORITE PUMP AND PIPING REPLACEMENT
  RED MOUNTAIN - OCT. 2007 FIRE DAMAGE - COMMUNICATION POWER TOWERS & METER STRUCTURES REPAIR/REPLACE (INCIDENT NO. 2007-1023-0271)
```

Description

```
Distribution Facilites
RED MTN COMM. TOWER & METER STRUCTURE
REHABILITATION OF THE GREG AVE PCS CONTROL BUILDING INTERIOR
RELOCATION OF ORANGE COUNTY FEEDER
RELOCATION OF PORTION OF ORANGE COUNTY FEEDER (MWD'S SHARE)
   REMAINING PORTIONS
  REPAIRS TO THE LA-35 DISCHARGE STRUCTURE
REPLACE 2 FIRE & DOMESTIC WATER SYSTEM
REPLACE COMMUNICATION LINE TO THE SAN GABRIEL CONTROL TOWER
  REPLACE COMMUNICATION LINE 10 THE SAN GABRIEL CONTROL TOWERS
REPLACE COPPER GROUNDWIRES ON DESERT HIGH VOLTAGE TRANSMISSION TOWERS
REPLACE VALVE POSITION INDICATORS
REPLACEMENT OF COMMUNICATION LINE AT SAN GABRIEL TOWER
REPLACEMENT AT-RISK PCCP LINES - STAGE 1
 REPLACEMENT/ RELINE AT-RISK PCCP LINES - STAGE 1
RIALTO FEEDER BROKEN BACK REPAIR
RIALTO FEEDER VALVE STRUCTURE
RIALTO FEEDER, REPAIRS AT SELECT LOCATIONS, STUDY
RIALTO PIPELINE - CONSTRUCTION PHASE 1
RIALTO PIPELINE - CONSTRUCTION PHASE 2
RIALTO PIPELINE IMPROVEMENTS
RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION
  RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION PHASE III
RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 2
  RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 3
RIALTO PIPELINE IMPROVEMENTS - FINAL DESIGN
  RIALTO PIPELINE IMPROVEMENTS - VALVE PROCUREMENT
RIALTO PIPELINE IMPROVEMENTS PHASE 1 FINAL DESIGN
  RIALTO PIPELINE POCP REHABILITATION
RIALTO PIPELINE REPAIR @ STA 3196+44
RIALTO PIPELINE REPAIR AT THOMPSON CREEK
  RIALTO PIPELINE REPAIRS AT STATION 3198+4
RIALTO PIPELINE VALVE PROCUREMENT
  ROBERT B. DIEMER FILTRATION PLANT - LAND ACQUISITION ROOF REPLACEMENT AT SOTO ST. FACILITY
  SAN DIEGO #3 BLOWOFF TO PUMPWELL CONVERSION
SAN DIEGO CANAL - EAST & WEST BYPASS SCREENING STRUCTURES STUDY
SAN DIEGO CANAL - ELECTRICAL VAULT & CONDUCTOR REPLACEMENT
SAN DIEGO CANAL - FENCING
 SAN DIEGO CANAL - FENCING
SAN DIEGO CANAL - INSTALL ACOUSTIC FLOW METER
SAN DIEGO CANAL - PIEZOMETER
SAN DIEGO CANAL - REPLACE SODIUM BISULFATE TANK
SAN DIEGO CANAL - SEEPAGE STUDY
SAN DIEGO CANAL BISULFITE TANK REPLACEMENT
SAN DIEGO CANAL LINER REPAIR
SAN DIEGO CANAL RADIAL GATE REHAB
   SAN DIEGO CANAL SEEPAGE STUDY
SAN DIEGO CANAL WEST BYPASS TRASH RACK
SAN DIEGO CANAL WEST BYPASS TRASH RACK
SAN DIEGO PIPELINE #4 VALVE REPLACEMENT
SAN DIEGO PIPELINE 1 BLOW-OFF VALVE REPLACEMENT
SAN DIEGO PIPELINE 1 BLOW-OFF VALVE REPLACEMENT
SAN DIEGO PIPELINE 3 & 5 REMOTE CONTROL OF BYPASS
SAN DIEGO PIPELINE 4 AND AULD VALLEY PIPELINE CARBON FIBER REPAIRS
SAN DIEGO PIPELINE 5 & LAKE SKINNER OUTLET REPAIR
SAN DIEGO PIPELINE 6 - PRESSURE CONTROL STRUCTURE/HYDROELECTRIC PLANT - FEASIBILITY STUDY
SAN DIEGO PIPELINE 6 NORTH REACH, ENVIRONMENTAL MONITORING DURING CONSTRUCTION
SAN DIEGO PIPELINE NO. 3 BYPASS
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - PLEASANT PEAK, COMMUNICATIONS
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILD
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION OF MAY (OPTIONAL PORTAL SITE)
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - ÁS BUILT
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL COST OF RIGHT OF WAY (OPTIONAL PORTAL SITE)
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL CONSTRUCTION
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PROGRAM MANAGEMENT
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL RIGHT OF WAY PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - CONTRACT NO. 1 SAN DIEGO CANAL TO MOUNT OLYMPUS
SAN DIEGO PIPELINE NO. 6 - CONTRACT NO. 2 MOUNT OLYMPUS TUNNEL & PORTALS
SAN DIEGO PIPELINE NO. 6 - NORTH REACH CONSTRUCTION - AS BUILT
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL - CONSTRUCTION
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL PRELIMINARY DESIGN
  SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONWENTAL FRELIMINART DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH FINAL DESIGN & ADVINTP
SAN DIEGO PIPELINE NO. 6 - NORTH REACH POST DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION
  SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY FINAL DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY PRELIMINARY DESIGN
   SAN DIEGO PIPELINE NO. 6 - NORTHERN PIPELINE COST OF RIGHT OF WAS
SAN DIEGO PIPELINE NO. 6 - NORTHERN REACH ENVIRONMENTAL FINAL DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTHERN REACH ENVIRONMENTAL FINAL DESIGN SAN DIEGO PIPELINE NO. 6 - OPERATIONS SCOPING STUDY SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - DESIGN SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - ENVIRONMENTAL SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - PROJECT MANAGEMENT SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - RIGHT OF WAY SAN DIEGO PIPELINE NO. 6 - PROJECT MANAGEMENT SAN DIEGO PIPELINE NO. 6 - RIGHT OF WAY SAN DIEGO PIPELINE NO. 6 - SOUTH REACH - PROGRAM MANAGEMENT SAN DIEGO PIPELINE NO. 6 - SOUTH REACH / TUNNEL STUDY SAN DIEGO PIPELINE NO. 6 - SOUTH REACH / CONSTRUCTION / AS BUILT SAN DIEGO PIPELINE NO. 6 - SOUTH REACH / CONSTRUCTION / AS BUILT SAN DIEGO PIPELINE NO. 6 - SOUTH REACH COST OF RIGHT OF WAY SAN DIEGO PIPELINE NO. 6 - SOUTH REACH COST OF RIGHT OF WAY SAN DIEGO PIPELINE NO. 6 - SOUTH REACH COST OF RIGHT OF WAY
  SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL - CONSTRUCTION SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL FINAL DESIGN
   SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH FINAL DESIGN/ADV
   SAN DIEGO PIPELINE NO. 6 - SOUTH REACH PIRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY PRELIMINARY DESIGN
    SAN DIEGO PIPELINE NO. 6 - SOUTH REACH TUNNEL ALIGNMENT ANALYSIS
   SAN DIEGO PIPELINE NO. 6 AREA STUDY
SAN DIEGO PIPELINE NO. 6 ENVIRONMENTAL MITIGATION
```

Description

```
Distribution Facilites
SAN DIEGO PIPELINE NO.4 & AULD VALLEY PIPELINE CARBON FIBER REPAIR STUDY
SAN DIEGO PIPELINE NO.4 & AULD VALLEY PIPELINE CARBON FIBER REPAIR STUDY
SAN DIEGO PIPELINE NOS. 1AND 3 - VALVE REPLACEMENT
SAN DIMAS CONTROL STRUCTURE 500 GALLONS DIESEL TANK REPLACEMENT
SAN DIMAS HEP BATTERY BANK AND GENERATOR BREAKER
SAN DIMAS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION
SAN FRANCISQUITO PIPELINE BLOW OFF STRUCTURE, STA 287+70, ACCESS ROAD CONSTRUCTION
SAN GABRIEL TOWER SEISMIC UPGRADE
SAN GABRIEL TOWER SLIDE GATE REHABILITATION
 SAN GABRIEL TOWER SLIDE GALE REHABILITATION
SAN JACINTO #1 AND #2 CASA LOMA FAULT CROSSING STRUCTURE UPGRADE
SAN JOAQUIN RELIEF STRUCTURE FOR EASTERN ORANGE COUNTY FEEDER #2
SAN JOAQUIN RELIEF STRUCTURE FOR EASTR OC FDR #2
SAN JOAQUIN RESERVOIR, INSTALL BULKHEAD
SANTA ANA RIVER BRIDGE SEISMIC RETROFIT
SANTA ANA RIVER BRIDGE SEISMIC UPGRADE
SANTA ANA RIVER BRIDGE SEISMIC UPGRADE
SANTA MONICA FEEDER RELOCATION
SANTA MONICA FEEDER STATION 495+10 REHABILITATION
SANTIAGO CONTROL TOWER CATHODIC PROTECTION
SANTIAGO LATERAL REPLACE MOTOR - OPERATED VALVE
SANTIAGO LATERAL SECTIONALIZATION VALVE REPLACEMENT
SANTIAGO LATERAL STA 216+40 BUTTERFLY VALVE REPLACEMENT
SANTIAGO PRESSURE CONTROL STRUCTURE
 SANTIAGO PRESSURE CUNI ROL STRUCTURE
SANTIAGO TOWER ACCESS ROAD IMPROVEMENT
SCADA COMMUNICATIONS MPLS UPGRADE - AT&T REGION (MINOR CAP)
SCADA COMMUNICATIONS MPLS UPGRADE - VERIZON REGION (MINOR CAP)
SCADA SYSTEM HARDWARE UPGRADE
 SCADA SYSTEM HARDWARE UPGRADE
SCADA SYSTEM NT SOFTWARE UPGRADE
SCADA SYSTEM SUPPORT PROGRAMS
SD AND CASA LOMA CANALS LINING
SD CANAL FAST & WEST BYPASS SCREENING STRUCTURES STUDY
SD CANAL REPLACE SODIUM BISULFITE TANK
 SD PIPELINE 3 CULVERT ROAD REHAB
SD PIPELINE 3,4, AND 5 PROTECTIVE COVER
 SD PIPELINE 4 EXPLORATORY EXCAVATION SD PIPELINE 5 EXPLORATORY EXCAVATION
 SD PIPELINES 3 AND 5 REMOTE CONTROL BYPASS STRUCTURE GATES AND ISOLATION VALVES SECOND LOWER & SEPULVEDA FEEDERS SCI DRAIN STATIONS SECOND LOWER CROSS FEEDER - VALVE PROCUREMENT SECOND LOWER CROSS FEEDER CONSTRUCTION SECOND LOWER CROSS FEEDER FINAL DESIGN
 SECOND LOWER FEEDER - INSTALL LINER
SECOND LOWER FEEDER - INSTALL LINER
SECOND LOWER FEEDER CATHODIC PROTECTION SYSTEM
SECOND LOWER FEEDER CURRENT MITIGATION REFURBISHMENT
SECOND LOWER FEEDER PCCP REHABILITATION
SECOND LOWER FEEDER PCCP REHABILITATION
SECOND LOWER FEEDER PCCP REPAIRS
SECOND LOWER FEEDER RELABILITY AT 3 LOCATIONS - SEISMIC STUDY
SEISMIC UPGRADE OF 11 FACILITIES ON THE ALLEN MCCOLLOCH PIPELINE
SELECTED PRESSURE REPLACE VALVE POSITION INDICATORS
SEPULVEDA CANYON CONTROL FACILITY WATER STORAGE TANKS SEISMIC UPGRADE
SEPULVEDA CANYON POWER PLANT TAIL RACE COATINGS
SEPULVEDA CANYON TANKS EXTERIOR AND INTERIOR RECOATING
SEPULVEDA FEEDER - CARBON FIBER LINER REPAIRS
SEPULVEDA FEEDER CATHODIC PROTECTION SYSTEM
SEPULVEDA FEEDER CORROSION/INTERFERENCE MITIGATION, STATION 950+00 TO 1170+00
SEPULVEDA FEEDER HEP AUTO PILOT
SEPULVEDA FEEDER REPAIRS AT 3 SITES
 SEPULVEDA FEEDER REPAIRS AT 3 SITES
SEPULVEDA FEEDER SOUTH CATHODIC PROTECTION SYSTEM
SEPULVEDA FEEDER SOUTH CATHODIC PROTECTION SYSTEM
SEPULVEDA FEEDER STATION 2002+02 TO 2273+28 STRAY CURRENT INTERFERENCE MITIGATION
SEPULVEDA FEEDER STRAY CURRENT MITIGATION REFURBISHMENT
SEPULVEDA PCS - PERIMETER ASPHALT REPAIRS
SEPULVEDA PIECLINE PCCP REHABILITATION
SERVICE CONNECTION LV-01 UPGRADES
SERVICE CONNECTION 0-26 - RELOCATION OF METER CABINET, INSTRUMENT HOUSING & AIR VENT STACK
SIMULATION AND MODELING APPLICATION FOR REAL TIME OPERATIONS SMART OPS
SITES 1 & 2 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN & PIPE FABRICATION
SKINNER BRANCH - AIR INJECTION MODIFICATIONS TO RED MOUNTAIN POWER PLANT
SKINNER BRANCH - CASA LOMA CANAL
SKINNER BRANCH - CASA LOMA SIPHON BARREL ONE
SKINNER BRANCH - CASA LOMA SIPHON BARREL ONE
  SKINNER BRANCH - CATWALK FOR TRAVELING MAINTENANCE BRIDGE FOR 
SKINNER BRANCH - FABRICATE & REPLACE THE STEMS, NUTS & KEYS 
SKINNER BRANCH - REPAIR MODULE 1 AND 2 FLOCCULATORS BRIDGES
  SKINNER DAM REMEDIATION
  SKINNER DISTRIBUTION SYSTEM - CONTRACT # 1396
SKINNER ELECTRICAL BUILDING HVAC UPGRADE
SKINNER FILTRATION PLANT - ELEVATED SLAB IN SERVICE BLDG 1
  SKINNER HELIPAD REHAB
SKINNER INSULATING FLANGES AT PLANT 1 BUTTERFLY VALVES
 SKINNER REPLACEMENT FOR WETCELL BATTERY AND INVERTER SKINNER SCADA SERVERS RELOCATION
SKINNER SCADA SERVERS RELUCATION
SMART-OPS (FORMERLY RTOS)
SOTO STREET FACILITY - BUILDING SEISMIC UPGRADE
SOTO STREET FACILITY - REPLACE HEATING
SOTO STREET FACILITY - ROOF REPLACEMENT
SOUTH COUNTY PIPELINE PROTECTION AT SAN JUAN CREEK CROSSING
SOUTH COUNTY PIPELINE PROTECTION AT SAN JUAN CREEK CROSSIN SOUTH REACH / TUNNEL STUDY SOUTH REACH CONSTRUCTION/ASBUILT - FUTURE UNAPPROPRIATED SOUTH REACH BOSIN - FUTURE/UNAPPROPRIATED SOUTH REACH ENVIRONMENTAL - FUTURE/UNAPPROPRIATED SOUTH REACH ENVIRONMENTAL - FUTURE/UNAPPROPRIATED SOUTH REACH PROJECT MANAGEMENT - FUTURE/UNAPPROPRIATED SOUTH REACH RIGHT OF WAY - FUTURE/UNAPPROPRIATED SPECIAL SERVICE BRANCH - REPLACE PLATE BENDING
  ST. JOHN'S CANYON CHANNEL EROSION MITIGATION SYSTEM RELIABILITY PROGRAM
  TEMESCAL POWER PLANT REPLACE EMERGENCY GENERATOR
  TREATED WATER CROSS CONNECTION PREVENTION - FINAL DESIGN & CONSTRUCTION TREATED WATER CROSS CONNECTION PREVENTION - UNFUNDED WORK
  TWO-WAY RADIO ENHANCEMENT - EMERGENCY SERVICES, FIRE CONTROL, EVACUATION & BLDG. MAINT.
```

Description Distribution Facilites
TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BLDG. MAINTENANCE UNDER GROUND STORAGE TANK DISPENSER SPILL CONTAINMENT & REMEDIATION
UNION STATION TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BUILDING MAINTENANCE UPGRADE CATHODIC PROTECTION RECTIFIERS
UPGRADE HOLLYWOOD TUNNEL PORTAL SLEEVE VALVE EQUIPMENT UPGRADE SUNSET GARAGE
UPPER FEEDER - SANTA ANA RIVER BRIDGE REPAIRS
UPPER FEEDER AIR ENTRAINMENT UPPER FEEDER AIR ENI KANIWEINI
UPPER FEEDER GATE REHABILITATION
UPPER FEEDER JUNCTION STRUCTURE SEISMIC UPGRADE
UPPER FEEDER SANTA ANA RIVER DISCHARGE PAD
UPPER FEEDER SERVICE CONNECTIONS UPGRADES UPPER FEEDER SERVICE CONNECTIONS UPGRADES
UPPER NEWPORT BAY BLOW-OFF STRUCTURE REHABILITATION
UPS SYSTEMS INSTALLATION AT FOOTHILL PCS
UPS SYSTEMS INSTALLATION AT PERRIS CONTROL STRUCTURE
UTILITY BUSINESS ARCHITECTURE (OBJECT MAPPING/MODELING)
VACUUM AIR RELEASE VALVE RELOCATION PILOT PROGRAM
VALLEY & LOS ANGELES DISTRIBUTION VALVE POSITION DISPLAY UPGRADE VALVE PROCUREMENT VIDEO CONFERENCE SYSTEM UPGRADE VIDEOCONFERENCING UPGRADE VIDEOCONFERENCING DEGRADE
WADSWORTH PUMPING PLANT - MODIFICATION/REPAIRS OF FIFTY-NINE 6.9KV BREAKERS/CABINETS
WADSWORTH PUMPING PLANT CONDUIT REPAIR AND PROTECTION
WADSWORTH PUMPING PLANT FOREBAY GANTRY CRANE UPGRADE
WADSWORTH PUMPING PLANT RECOATING 144* YARD PIPING WADSWORTH PUMPING PLANT RECOATING 144" YARD PIPING WADSWORTH PUMPING PLANT STOP LOGS ADDITION - STUDY WATER DELIVERY SYSTEM AUTOMATION WATER PLANNING APPLICATION WATER QUALITY - REMOTE MONITORING WATER QUALITY LABORATORY BUILDING EXPANSION WATER QUALITY MONITORING AND EVENT DETECTION SYSTEM WATER TREATMENT PROCESS OPTIMIZATION WASTER TREATMENT PROCESS OPTIMIZATION SYSTEMS WATER TREATMENT PROJESS OF IMIZATION
WEST COAST FEEDER - CATHODIC PROTECTION SYSTEMS
WEST OC FEEDER VALVE REPLACEMENT
WEST VALLEY AREA STUDY
WEST VALLEY FEEDER # 1 STAGE 2 VALVE STRUCTURE MODIFICATIONS - CONSTRUCTION WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURES IMPROVEMENTS WEST VALLEY FEEDER NO. 1 VALVE STRUCTURE MODIFICATIONS WESTERN REGION PLUMBING RETROFIT WEST IERN REGION PLUMBING RETROFTI WEYM, PLT/LA VERNE FAC-BACKFLO PREV ASSY WEYMOUTH - BUILDING NO. 4 - HAND RAIL AND STAIRS ADDITION WEYMOUTH - FLAG POLE AREA LANDSCAPE UPGRADE WEYMOUTH ASPHALT REHABILITATION WEYMOUTH COMPRESSED AIR SYSTEM
WEYMOUTH DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT #1396 WFP - ASPHALT REHABILITATION WFP - COMPRESSED AIR SYSTEM IMPROVEMENT WFP - COMPRESSED AIR SYSTEM IMPROVEMENT
WFP - LAND ACQUISITION
WFP - PURCHASE OF REAL PROPERTY
WFP - REPAIR TO BLDG # 1
WFP - REPLACE ACTUATORS/OPERATORS/ MOTORS FOR EFFLUENT VALVE CONVERSION FILTER BEDS 1-24
WFP - WASHWATER RECLAMATION (WWRP)
YORBA LINDA FEDER - STA 924+11 PORTAL ACCESS
YORBA LINDA FEEDER - STA 924+11 PORTAL ACCESS YORBA LINDA FEEDER BYPASS YORBA LINDA PORTAL STRUCTURE ACCESS/TELEGRAPH CREEK BRIDGE

Sub-total Distribution facilities benefits

\$ 73,144,882

Sub-total Conveyance and Distribution facilities benefits

\$ 155,929,608

TABLE 4

FISCAL YEAR 2016/17
ESTIMATED READINESS-TO-SERVE CHARGE REVENUE

Mambar Aranau	Rolling Ten- Year Average Firm Deliveries (Acre-Feet) FY2004/05 - FY2013/14	RTS Share	6 months @ \$153 million per year (7/16- 12/16)	Rolling Ten- Year Average Firm Deliveries (Acre-Feet) FY2005/06 - FY2014/15	RTS Share	6 months @ \$135 million per year (1/17- 6/17)	Total RTS Charge FY 2016/17
Member Agency Anaheim	21.646	1.26%	965,812	20.890	1.22%	822,387	1,788,198
Beverly Hills	11,468	0.67%	511,693	11,386	0.66%	448,235	959,928
Burbank	12,769	0.67%	569,715	12,817	0.75%	504,598	1,074,313
Calleguas MWD	110,216	6.43%	4,917,644	109,124	6.36%	4,296,031	9,213,675
Central Basin MWD	53,106	3.10%	2,369,501	51,539	3.01%	2,029,003	4,398,504
Compton	2,222	0.13%	99,150	1,924	0.11%	75,756	4,396,504 174,907
Eastern MWD	98,854	5.77%	4,410,675	98,628	5.75%	3,882,806	8,293,482
Foothill MWD	9,999	0.58%	446.114	98,028	0.57%	385,395	831.509
Fullerton	9,902	0.58%	441,799	9,668	0.56%	380,620	822,419
Glendale	20,157	1.18%	899,367	19,594	1.14%	771,369	1,670,736
Inland Empire Utilities Agency	60,390	3.52%	2,694,504	60,811	3.55%	2,394,010	5,088,513
Las Virgenes MWD	22,702	1.32%	1,012,933	22,750	1.33%	895,608	1,908,541
Long Beach	33,643	1.96%	1,501,086	34,316	2.00%	1,350,941	2,852,027
Los Angeles	297,705	17.36%	13,283,020	312,096	18.20%	12,286,660	25,569,680
Municipal Water District of Orange County	220,916	12.88%	9,856,838	221,545	12.92%	8,721,831	18,578,669
Pasadena	21,506	1.25%	959,574	21,181	1.24%	833,843	1,793,417
San Diego County Water Authority	377,077	21.99%	16,824,451	367,123	21.41%	14,452,980	31,277,430
San Fernando	122	0.01%	5,457	82	0.00%	3,240	8,697
San Marino	1,000	0.06%	44,614	931	0.05%	36,644	81,258
Santa Ana	13,091	0.76%	584,077	12,605	0.74%	496,221	1,080,298
Santa Monica	10,146	0.59%	452,704	9,252	0.54%	364,251	816,955
Three Valleys MWD	66,509	3.88%	2,967,508	65,261	3.81%	2,569,222	5,536,730
Torrance	18,514	1.08%	826,068	18,130	1.06%	713,750	1,539,818
Upper San Gabriel Valley MWD	18,292	1.07%	816,140	22,143	1.29%	871,739	1,687,879
West Basin MWD	128,160	7.47%	5,718,230	125,379	7.31%	4,935,938	10,654,168
Western MWD	74,439	4.34%	3,321,325	75,617	4.41%	2,976,923	6,298,248
MWD Total	1.714.552	100.00%	\$ 76,500,000	1,714,580	100.00%		\$ 144,000,000

TABLE 5

FISCAL YEAR 2015/16
ESTIMATED STANDBY CHARGE REVENUE

Member Agencies	Total Parcel Charge		Number Of Parcels Or Acres	Gross Revenues (Dollars) ¹
Anaheim	\$	8.55	68,113	\$ 582,362
Beverly Hills	Ψ	0.00	-	Ψ 302,302
Burbank		14.20	29,055	412,577
Calleguas MWD		9.58	259,212	2,483,251
Central Basin MWD		10.44	339,675	3,546,211
Compton		8.92	18,091	161,372
Eastern MWD		6.94	398,973	2,768,876
Foothill MWD		10.28	30,335	311,842
Fullerton		10.71	34,708	371,724
Glendale		12.23	44,900	549,130
Inland Empire Utilities Agency		7.59	255,066	1,935,952
Las Virgenes MWD		8.03	55,303	444,082
Long Beach		12.16	91,968	1,118,332
Los Angeles		-	-	-
Municipal Water District of Orange County 2		10.09	718,283	7,378,409
Pasadena		11.73	38,952	456,901
San Diego County Water Authority		11.51	1,104,307	12,710,571
San Fernando		7.87	5,115	40,258
San Marino		8.24	4,968	40,935
Santa Ana		7.88	54,201	427,105
Santa Monica		-	-	-
Three Valleys MWD		12.21	152,015	1,856,103
Torrance		12.23	40,460	494,820
Upper San Gabriel Valley MWD		9.27	211,919	1,964,492
West Basin MWD		-	-	-
Western MWD		9.23	386,694	3,569,189
MWD Total			4,342,313	\$ 43,624,493

⁽¹⁾ Estimates per FY2015/16 applied amounts

Note: Totals may not foot due to rounding.

⁽²⁾ Adjusted for inclusion of Coastal MWD

TABLE 6 PARCELS SUBJECT TO ANNEXATION STANDBY CHARGES AS OF JULY 1, 2015

Annexation	Parcel Number	Acres	Proposed Standby Charge (FY 2015/16)
Eastern MWD			
104th Fringe Area	362-040-013	4.77	33.10
10 101 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	362-040-036	5.64	39.14
	362-040-038	1.98	13.74
	362-040-039	4.78	33.17
	362-040-040	4.78	33.17
	362-040-041	4.78	33.17
	362-040-042	4.78	33.17
	362-050-006	2.79	19.36
	362-050-007	3.94	27.34
	362-050-008	1.06	7.36
	362-060-001	5.00	34.70
	362-430-002	10.08	69.96
	362-430-005	2.09	14.50
	362-430-011	2.09	14.50
	362-430-017	2.28	15.82
	362-430-018	2.12	14.71
	362-450-008	2.08	14.44
Western MWD			
41st Fringe (Murrieta)	906-270-040	2.39	22.06
	906-270-041	2.39	22.06
	906-270-042	2.31	21.32
San Diego County:			
Meadowood Annexation	108-120-52-00	10.97	105.09
Weadowood Allilexation	108-120-53-00	12.71	121.76
	108-120-54-00	43.24	414.24
	108-121-15-00	24.86	238.16
	108-122-03-00	22.59	216.41
	108-122-08-00	29.78	285.29
	108-122-09-00	31.06	297.55
	108-122-15-00	97.77	936.64
	108-122-19-00	75.98	727.89
	125-061-04-00	22.93	219.67
	125-061-07-00	5.31	50.87
	125-062-07-00	2.81	26.92
	125-062-04-00	2.81	26.92
Lake Wohlford Reorganization	240-030-27	1.30	12.45
-			

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA RESOLUTION 9205

RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA
FIXING AND ADOPTING
A CAPACITY CHARGE
EFFECTIVE JANUARY 1, 2017

WHEREAS, the Board of Directors ("Board") of The Metropolitan Water District of Southern California ("Metropolitan"), pursuant to Sections 133, 134 and 134.5 of the Metropolitan Water District Act (the "Act"), is authorized to fix such rate or rates for water as will result in revenue which, together with revenue from any water standby or availability of service charge or assessment, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt; and

WHEREAS, the Capacity Charge is charged (on a dollar per cubic-foot-per-second basis) to member agencies, based upon the amount of capacity used by such member agency that is designed to recover the cost of providing peaking capacity within the distribution system; and

WHEREAS, on February 8, 2016, the General Manager presented to the Finance and Insurance Committee of Metropolitan's Board his proposed biennial budget for fiscal years 2016/17 and 2017/18, determination of total revenues and of revenues to be derived from water sales and firm revenue sources required during the fiscal years 2016/17 and 2017/18; and

WHEREAS, Board workshops and discussions regarding the proposed biennial budget for fiscal years 2016/17 and 2017/18 and water rates and charges for 2017 and 2018 were held on February 8, 2016 and March 7, 2016 at the regularly scheduled Finance and Insurance Committee meetings, and on February 23, 2016 and March 22, 2016 at the Finance and Insurance Committee; and

WHEREAS, the Board conducted a public hearing on its proposed rates and charges for 2017 and 2018 at its regular meeting on March 8, 2016, at which interested parties were given the opportunity to present their views regarding the proposed rates and charges; and

WHEREAS, notice of the public hearing on the proposed rates and charges was published prior to the hearing in various newspapers of general circulation within Metropolitan's service area; and

WHEREAS, written notice of intention of Metropolitan's Board to consider and take action at its regular meeting to be held April 12, 2016, to adopt Metropolitan's Capacity Charge for calendar year 2017 was given to each of Metropolitan's member public agencies; and

WHEREAS, based on the feedback received from board workshops held on February 8, 2016, February 23, 2016, March 7, 2016, and March 22, 2016, and at the public hearing on March 8, 2016, the General Manager proposed rates and charges on April 12, 2016; and

WHEREAS, the supporting cost of service report was provided to the Board on March 16, 2016, was discussed with the Board on March 22, 2016, and an updated cost of service report with minor revisions was provided to the Board on March 30, 2016; and

WHEREAS, on April 12, 2016, the board considered the rates and charges presented by the General Manager and approved the biennial budget for fiscal years 2016/17 and 2017/18 and adopted recommended water rates and charges for 2017 and 2018; and

WHEREAS, in adopting the rates and charges on April 12, 2016, the Board determined the amount of revenue to be raised by the Capacity Charge in 2017 to be based on a Capacity Charge in such year of \$8,000 per cubic-feet-per-second; and

WHEREAS, the amount of revenue to be raised by the Capacity Charge shall be as determined by the Board and allocation of such charges among member public agencies shall be in accordance with the method established by the Board; and

WHEREAS, the Capacity Charge is a charge fixed and adopted by Metropolitan and charged to its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and

WHEREAS, Metropolitan has legal authority to fix and adopt the Capacity Charge as a water rate pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the "Act"); and

WHEREAS, under authority of Sections 133 and 134 of the Act, the Board has the authority to fix the rate or rates for water as will result in revenue which, together with other revenues, will pay Metropolitan's operating expenses and provide for the payment of other costs, including payment of the interest and principal of Metropolitan's non-tax funded debt; and

WHEREAS, the Capacity Charge is intended to recover the debt service and other appropriately allocated costs to construct, operate and maintain projects needed to meet peak demands on Metropolitan's distribution system, as shown in the cost of service report; and

WHEREAS, in the alternative, under Section 134.5 of the Metropolitan Water District Act, an availability of service charge may be collected from the member public agencies within Metropolitan;

WHEREAS, each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout; and

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California does hereby resolve, determine and order as follows:

- **Section 1.** That the Board of Directors of Metropolitan hereby fixes and adopts a Capacity Charge, as described below, to be effective January 1, 2017.
- **Section 2.** That the Capacity Charge shall be in an amount sufficient to provide for payment of the capital financing costs not paid from ad valorem property taxes, as well as operations, maintenance and overhead costs incurred to provide peaking capacity within Metropolitan's distribution system, which Metropolitan owns or has the right to use.
- **Section 3.** That such Capacity Charge effective January 1, 2017 shall be a charge as specified in Section 6 (set in dollars per cubic-feet-per-second of the peak day capacity) for capacity provided to a member agency.
- **Section 4.** That in the alternative, and without duplication, the Capacity Charge shall be an availability of service charge pursuant to Section 134.5 of the Act.
- **Section 5.** That the Capacity Charge specified in Table 1 does not exceed the reasonable and necessary cost of providing the service for which the charge is made, or conferring the benefit provided, and is fairly apportioned to each member agency in proportion to the peak day capacity utilized by each member agency. Accordingly, the Board finds and determines that the Capacity Charge is a reasonable fee charged according to the burden on or benefit from the use of capacity of Metropolitan's distribution system, which Metropolitan owns or has the right to use.

Section 6. That the Capacity Charge shall be a fixed charge as shown in the following table and collected from each member agency monthly, quarterly or semiannually as agreed to by Metropolitan and the member agency.

Table 1. Calendar Year 2017 Capacity Charge

	Peak Day Demand (cfs)				
	(May 1 through September 30)				Rate (\$/cfs):
	Calendar Year				\$8,000
					Calendar Year
					2017 Capacity
AGENCY	2013	2014	2015	3-Year Peak	Charge
Anaheim	31.3	34.0	33.7	34.0	\$272,000
Beverly Hills	30.8	30.6	25.5	30.8	\$246,400
Burbank	19.7	22.6	10.0	22.6	\$180,800
Calleguas	228.7	240.8	175.5	240.8	\$1,926,400
Central Basin	73.6	61.0	51.4	73.6	\$588,800
Compton	2.9	0.0	0.1	2.9	\$23,200
Eastern	262.1	239.4	177.2	262.1	\$2,096,800
Foothill	18.9	19.9	14.9	19.9	\$159,200
Fullerton	20.0	22.2	15.3	22.2	\$177,600
Glendale	44.9	43.7	33.2	44.9	\$359,200
Inland Empire	153.9	144.0	94.8	153.9	\$1,231,200
Las Virgenes	43.2	46.1	42.8	46.1	\$368,800
Long Beach	66.9	67.8	61.3	67.8	\$542,400
Los Angeles	767.1	782.5	600.9	782.5	\$6,260,000
MWDOC	379.4	443.1	293.0	443.1	\$3,544,800
Pasadena	52.5	48.5	36.9	52.5	\$420,000
San Diego CWA	967.4	1138.2	960.7	1,138.2	\$9,105,600
San Fernando	4.9	0.0		4.9	\$39,200
San Marino	6.1	7.3	4.7	7.3	\$58,400
Santa Ana	19.6	17.5	15.6	19.6	\$156,800
Santa Monica	22.7	15.2	11.7	22.7	\$181,600
Three Valleys	178.6	152.8	108.1	178.6	\$1,428,800
Torrance	34.1	33.5	28.2	34.1	\$272,800
Upper San Gabriel	16.1	40.4	79.1	79.1	\$632,800
West Basin	230.2	217.5	178.5	230.2	\$1,841,600
Western MWD	197.7	179.7	137.7	197.7	\$1,581,600
Total	3,873.3	4,048.3	3,190.8	4,212.1	\$33,696,800

Totals may not foot due to rounding

Section 7. That the Capacity Charge for each member public agency, the method of its calculation, cost allocations and other data used in its determination are as specified in the General Manager's recommendation on rates and charges to be effective January 1, 2017, and the corresponding cost of service report. Such recommendation and cost of service report are on file and available for review by interested parties at Metropolitan's headquarters.

Section 8. That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

Section 9. That this Board finds that the proposed capacity charge is not defined as a Project under the California Environmental Quality Act ("CEQA") since it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition,

the proposed action is not subject to CEQA because it involves the creation of government funding mechanisms or other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

Section 10. That the General Manager is hereby authorized and directed to take all necessary action to satisfy relevant statutes requiring notice by publication.

Section 11. That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member public agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 12, 2016.

Secretary of the Board of Directors of The Metropolitan Water District of Southern California

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA RESOLUTION 9206

RESOLUTION OF THE BOARD OF DIRECTORS
OF THE METROPOLITAN WATER DISTRICT OF
SOUTHERN CALIFORNIA

FINDING THAT CONTINUING AN AD VALOREM PROPERTY TAX RATE AT THE RATE LEVIED FOR 2015/16 IS ESSENTIAL TO THE FISCAL INTEGRITY OF THE DISTRICT AND SUSPENDING THE AD VALOREM TAX RATE RESTRICTION FOR FISCAL YEARS 2016/17 AND 2017/18

WHEREAS, The Metropolitan Water District of Southern California ("Metropolitan"), pursuant to Section 124 of the Metropolitan Water District Act (the "Act"), 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; and

WHEREAS, pursuant to Section 307 of the Act, the Board of Directors ("Board") determines the amount of money necessary to be raised by taxation for district purposes each fiscal year and fixes rates of taxation upon the assessed valuation of property taxable by the district to be levied accordingly; and

WHEREAS, since its inception Metropolitan has levied and collected property taxes; and

WHEREAS, the Board, pursuant to sections 133 and 134 of the Act, is authorized to fix the rate or rates at which water shall be sold. Such rates, so far as practicable, shall result in revenue which, together with revenue from fixed charges or assessments, will pay Metropolitan's operating expenses, capital costs, debt service and other expenses and obligations; and

WHEREAS, before 1942, all revenues to pay for operations, construction of the Colorado River Aqueduct, other facilities and other Metropolitan obligations came from ad valorem property taxes. After deliveries of Metropolitan water began in fiscal year 1941/42, water sales were an additional source of revenues, but not until 1974 did revenues from water sales equal revenues from ad valorem taxes; and

WHEREAS, on November 4, 1960, Metropolitan entered into its contract with the California Department of Water Resources (the "State Water Contract") for water service from the State Water Project. Metropolitan's was the first contract executed and the prototype for the 28 state water contracts that followed; its terms were validated by the California Supreme Court in *Metropolitan Water Dist. v. Marquardt* (1963) 59 Cal.2d 159; and

WHEREAS, under the State Water Contract, Metropolitan is obligated to pay allocable portions of the cost of construction and replacement of the State Water Project system, as well as ongoing operating and maintenance costs, regardless of quantities of water delivered to Metropolitan and regardless of the amounts of water Metropolitan sells to its member agencies. Approximately 75 percent of Metropolitan's State Water Contract obligations are fixed, or unrelated to the quantity of water delivered; and

WHEREAS, Metropolitan's authority to levy a tax or assessment to satisfy State Water Contract obligations was a condition to entering into the State Water Contract, and the California Department of Water Resources only executed state water contracts with agencies that have taxing power; and

WHEREAS, the State Water Contract expressly provides that, if other available funds are not sufficient, Metropolitan must levy a tax or assessment to satisfy its State Water Contract obligations; and

WHEREAS, Metropolitan's outstanding general obligation bonds and State Water Contract obligations are indebtedness approved by the California voters before Article XIII A of the California Constitution (Proposition 13) was adopted; and

WHEREAS, Metropolitan's revenues from water sales and deliveries vary with the quantity of water delivered and water deliveries fluctuate significantly with drought, weather conditions, availability of local supplies, economic conditions and other factors affecting regional demands. During the period from fiscal year 2008/09 through fiscal year 2014/15, Metropolitan's annual deliveries ranged from 1.6 million acre-feet to 2.1 million acre-feet; and

WHEREAS, when fixing taxes and setting rates, the Board and Metropolitan's member agencies evaluate the appropriate mix of property taxes and water rates and charges to promote Metropolitan's fiscal stability and ensure its ability to satisfy the region's long-term water supply needs while reasonably and fairly allocating the cost of providing service to its member agencies and complying with legal requirements; and

WHEREAS, on May 8, 1984, the Board approved proposed amendments to the Act, set forth in Board Letter 6-2 dated April 30, 1984; and

WHEREAS, such amendments were incorporated into Assembly Bill 1445, which was approved by the Legislature and filed with the California Secretary of State on July 3, 1984, and added to the Act as Section 124.5; and

WHEREAS Section 124.5 provides that Metropolitan must limit the ad valorem property tax to collect no more than the amount required to pay for a fraction of voter-approved debt, specifically, the composite amount required to pay (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 Metropolitan, 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; and

WHEREAS Section 124.5 further provides that Metropolitan may suspend the ad valorem property tax restriction "if the board of directors of the district, following a hearing held to consider that issue, finds that a tax in excess of these restrictions is essential to the fiscal integrity of the district, and written notice of the hearing is filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate at least 10 days prior to that date of the hearing;" and

WHEREAS, Section 124.5's rate restriction became effective in fiscal year 1990/91; and

WHEREAS, in fiscal years 1990/91 through 1999/2000, the Board maintained Metropolitan's tax levy rate at .0089 percent, a rate that was below the rate then permitted under the restriction clause of Section 124.5; and

WHEREAS, Metropolitan's tax levy rate has declined from .0089 percent in fiscal year 1999/2000 to .0035 percent in fiscal year 2012/13; and

WHEREAS, on June 11, 2013, the Board held a public hearing, with advance notice as required by Section 124.5, to consider Resolution 9156, "A RESOLUTION OF THE BOARD OF DIRECTORS OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA FINDING THAT MAINTAINING THE AD VALOREM TAX RATE FOR FISCAL YEAR 2013/14 IS ESSENTIAL TO THE FISCAL INTEGRITY OF THE DISTRICT";

WHEREAS, at the June 11, 2013 public hearing, the Board received, considered, and evaluated public comments and evidence and all material factors pertaining thereto, including the financial and operating information summarized in Board Letter 8-2 executed by the Chief Financial Officer and General Manager on May 31, 2013; and

WHEREAS, as described in Resolution 9156, the Board found that a tax rate in excess of the restriction set out in Section 124.5 was essential to the fiscal integrity of Metropolitan; and

WHEREAS, by Resolution 9156 the Board resolved and determined that the tax rate restriction in Section 124.5 was suspended for fiscal year 2013/14 and that the Board in its discretion may levy taxes for fiscal year 2013/14 at the tax rate levied for fiscal year 2012/13 (.0035 percent of assessed valuation, excluding annexation levies); and

WHEREAS, on August 20, 2013, the Board adopted Resolution 9157, "A RESOLUTION LEVYING TAXES FOR THE FISCAL YEAR COMMENCING JULY 1, 2013 AND ENDING JUNE 30, 2014 FOR THE PURPOSES OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA", which set the tax rate for fiscal year 2013/14 at .0035 percent; and

WHEREAS, on March 11, 2014, the Board held a public hearing with advance notice as required by Section 124.5, to consider the recommendation to suspend the tax restriction clause of Section 124.5 to maintain the ad valorem tax at current levels, and to give interested parties the opportunity to present their views regarding the recommendation to suspend the tax restriction clause of Section 124.5 to maintain the ad valorem tax at current levels; and

WHEREAS, on August 19, 2014, the Board considered Resolution 9181, "A RESOLUTION OF THE BOARD OF DIRECTORS OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA FINDING THAT MAINTAINING THE AD VALOREM TAX RATE FOR FISCAL YEAR 2013/14 IS ESSENTIAL TO THE FISCAL INTEGRITY OF THE DISTRICT"; and

WHEREAS, at the August 19, 2014 meeting, the Board received, considered, and evaluated public comments and evidence and all material factors pertaining to Resolution 9181, including the financial and operating information summarized in Board Letter 5J-2 executed by the Chief Financial Officer and General Manager; and

WHEREAS, at the August 19, 2014 meeting, the Board adopted Resolution 9181, through which it resolved and determined that the tax rate restriction in Section 124.5 was suspended for fiscal year 2014/15 and that the Board in its discretion may levy taxes for fiscal year 2014/15 at the tax rate levied for fiscal year 2013/14 (.0035 percent of assessed valuation, excluding annexation levies); and

WHEREAS, on August 19, 2014, the Board adopted Resolution 9182, "A RESOLUTION LEVYING TAXES FOR THE FISCAL YEAR COMMENCING JULY 1, 2014 AND ENDING JUNE 30, 2015 FOR THE PURPOSES OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA", which set the tax rate for fiscal year 2014/15 at .0035 percent; and

WHEREAS, on August 18, 2015, the Board considered Resolution 9194, "A RESOLUTION OF THE BOARD OF DIRECTORS OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA FINDING THAT MAINTAINING THE AD VALOREM TAX RATE FOR FISCAL YEAR 2014/15 IS ESSENTIAL TO THE FISCAL INTEGRITY OF THE DISTRICT"; and

WHEREAS, at the August 18, 2015 meeting, the Board received, considered, and evaluated public comments and evidence and all material factors pertaining to Resolution 9194, including the financial and operating information summarized in Board Letter 5J-2 executed by the Chief Financial Officer and General Manager; and

WHEREAS, at the August 18, 2015 meeting, the Board adopted Resolution 9194, through which it resolved and determined that the tax rate restriction in Section 124.5 was suspended for fiscal year 2015/16 and that the Board in its discretion may levy taxes for fiscal year 2015/16 at the tax rate levied for fiscal year 2014/15 (.0035 percent of assessed valuation, excluding annexation levies); and

WHEREAS, on August 18, 2015, the Board adopted Resolution 9195, "A RESOLUTION LEVYING TAXES FOR THE FISCAL YEAR COMMENCING JULY 1, 2015 AND ENDING JUNE 30, 2016 FOR THE PURPOSES OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA", which set the tax rate for fiscal year 2015/16 at .0035 percent; and

WHEREAS, on March 8, 2016, the Board held a public hearing with advance notice as required by Section 124.5, to consider the recommendation to suspend the tax restriction clause of Section 124.5 to maintain the ad valorem tax at current levels, and to give interested parties the opportunity to present their views regarding the recommendation to suspend the tax restriction clause of Section 124.5 to maintain the ad valorem tax at current levels; and

WHEREAS, Metropolitan currently utilizes tax revenues solely to pay debt service on its general obligation bonds, approved by the voters in 1966 and presently outstanding in the amount of \$110,420,000 as of December 31, 2015, and a small portion of its State Water Contract obligations; and

WHEREAS, Metropolitan provides, sells and delivers a reliable water supply at wholesale to its member agencies throughout a broad service area; and

WHEREAS, the water supply, conveyance rights and other rights to the State Water Project that Metropolitan receives under the State Water Contract are fundamental to Metropolitan's ability to consistently provide a reliable water supply and delivery at wholesale to its service area and, thus, satisfaction of its State Water Contract obligations is essential to Metropolitan's mission; and

WHEREAS, the State Water Project facilities are over 50 years old and Metropolitan's State Water Contract obligations include increasing costs for repair and replacement of existing facilities that are needed to both maintain the storage and conveyance capacity of the State Water Project facilities and assure continued availability and delivery of supplies from the State Water Project and other sources. These costs and obligations were not foreseen by the Legislature when, in 1984, it established the Section 124.5 tax rate restriction and nothing suggests that the Legislature intended to prohibit the Board from considering such circumstances when deciding whether suspension of the restriction is essential to Metropolitan's fiscal integrity; and

WHEREAS, Metropolitan's State Water Contract obligations also include substantial construction, replacement, operation and maintenance costs for endangered species protection and conservation measures, consistent with state and federal mandates. These obligations must be undertaken to ensure the reliability of the State Water Project, to address ecosystem needs and to secure long-term operating permits consistent with the federal and state endangered species acts. These costs and obligations were not foreseen or considered by the Legislature when, in 1984, it established the Section 124.5 rate restriction and nothing suggests that the Legislature intended to prohibit the Board from considering such circumstances when deciding whether suspension of the restriction is essential to Metropolitan's fiscal integrity; and

WHEREAS, consideration of, and providing for, current and anticipated State Water Contract obligations is essential to Metropolitan's fiscal stability and integrity; and

WHEREAS, availability of diverse financial resources to satisfy Metropolitan's State Water Contract obligations is essential to Metropolitan's fiscal stability and integrity; and

WHEREAS, an appropriate balance of fixed costs and fixed revenue is essential to Metropolitan's long-term fiscal health; and

WHEREAS, the ad valorem tax is essential to the appropriate balance of fixed costs and fixed revenue under current circumstances; and

WHEREAS, continuing an ad valorem property tax rate at the current rate will allow the Board flexibility to fund Metropolitan's State Water Contract obligations fully and fairly in fiscal year 2016/17 and 2017/18 and for the foreseeable future; and

WHEREAS, when it enacted Section 124.5, the Legislature recognized the importance of robust fixed revenue sources. At the same time that it established the rate restriction and safety valve to suspend the restriction, it authorized alternative fixed revenue sources in the form of benefit assessments and standby charges. To the extent such charges would be assessments or property-related fees, they would be governed by additional requirements not in place or contemplated when the Legislature enacted Section 124.5. In the Board's judgment, such charges are not practical fixed revenue sources at this time; and

WHEREAS, in FY 2016/17, approximately 80 percent of Metropolitan's estimated costs are fixed, while approximately 17 percent of Metropolitan's revenues are from fixed sources, including ad valorem property taxes, readiness-to-serve and capacity charges; in FY 2017/18, approximately 80 percent of Metropolitan's estimated costs are fixed, while approximately 16 percent of Metropolitan's revenues are from fixes sources, including ad valorem property taxes, readiness-to-serve and capacity charges. Suspending the rate restriction will allow Metropolitan to sustain ad valorem property tax revenues at 6 percent of overall revenues in fiscal years 2016/17 and 2017/18 and at an estimated 5 percent of overall revenues in fiscal year 2025/26. Absent suspension, it is anticipated that, in fiscal years 2016/17 and 2017/18, ad valorem property tax revenue will drop to approximately 3 percent of overall revenue and, by fiscal year 2025/26, it will be only 0.1 percent of overall revenue; and

WHEREAS, absent maintenance of the tax rate or other changes, fiscal years 2016/17 and 2017/18 fixed revenues as a percentage of total revenues will decline from 17 percent to 14 percent in fiscal year 2016/17 and from 16 percent to 13 percent in fiscal year 2017/18; fixed revenues as a percentage of total revenues will decline from 16 percent to 10 percent in fiscal year 2025/26; and this decline will continue; and

WHEREAS, in light of Metropolitan's significant fixed costs and fluctuating volumetric revenues, robust and diverse fixed revenues are essential to Metropolitan's fiscal well-being for the additional reason that they help Metropolitan maintain creditworthiness. Positive credit ratings are central to fiscal integrity because they reduce the cost of borrowing and provide flexibility by increasing access to credit markets. Access to credit markets is especially important whenever Metropolitan faces supply or demand uncertainties. As set forth above, suspending the tax rate restriction will allow Metropolitan to retain important fixed revenues, whereas, absent suspension, these fixed revenues will be lost; and

WHEREAS, ad valorem taxes are an important component of Metropolitan's fiscal integrity because they help ensure that those for whom costs are incurred help pay those costs. As a wholesale water agency, Metropolitan's customers are its 26 member agencies. Each member agency pays volumetric rates based on the amount of water Metropolitan sells and delivers to it; whereas ad valorem taxes are levied directly on residents and businesses that are property owners within Metropolitan's service area. All property owners within Metropolitan's service area benefit from the water system that allows water to be sold and delivered in Southern California. Ad valorem taxes ensure that residences and businesses pay a share of costs of the system; and

WHEREAS, maintaining the existing ad valorem tax rate advances fiscal integrity because it takes pressure off Metropolitan's volumetric water rates and readiness-to-serve and capacity charges and assist the Board, in its discretion, in maintaining a fair and appropriate balance between fixed costs and fixed revenues and help ensure that all who benefit from Metropolitan's service pay a fair share of the cost of that service; and

WHEREAS, maintaining the existing ad valorem tax rate and preventing the decline in fixed revenues will create a more stable water revenue structure that can better deal with fluctuations in water sales and support drought response measures; and

WHEREAS, Metropolitan's reliance on property taxes is significantly lower than most other agencies that entered into state water contracts. Other state water contractors rely on property taxes to cover up to 100 percent of their state water contract obligations. Even if all Metropolitan's property tax revenue were fully allocated to State Water Contract obligations—and it is not—Metropolitan would cover only 17 percent of its fiscal years 2016/17 and 2017/18 State Water Contract obligations. This percentage is at the far low end for state water contractors; and

WHEREAS, an analysis of fiscal health and stability must consider long-term circumstances, and the full spectrum of facts and circumstances, including the appropriate mix of property taxes and water rates and charges that will best allow Metropolitan to satisfy the region's long-term water supply needs; and

WHEREAS, notices of the public hearing were filed with the offices of the Speaker of the Assembly and the President pro Tempore of the Senate on February 22, 2016; and

WHEREAS, the Board conducted a public hearing at its regular meeting on March 8, 2016, at which interested parties were given the opportunity to present their views regarding the recommendation to suspend the tax restriction clause of Section 124.5 to maintain the ad valorem tax at current levels; and

WHEREAS, the Board has carefully considered the comments and evidence and all material factors relevant to a finding that suspension of the tax rate restriction is essential to Metropolitan's fiscal integrity; and

WHEREAS, the meeting of the Board was conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which a quorum was present and acting throughout;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California, after receiving, considering, and evaluating public comments and evidence and all material factors pertaining thereto, including the financial and operating information summarized in Board Letter 8-1 executed by the Chief Financial Officer and General Manager for itsApril 12, 2016 meeting and in recognition of the facts and considerations set forth in this Resolution, hereby:

- 1. Finds and determines that a tax rate in excess of the restriction set out in Section 124.5 of the Act is essential to the fiscal integrity of Metropolitan; and
- 2. Resolves and determines that the tax rate restriction in Section 124.5 of the Act is hereby suspended for the limited purpose of allowing the Board in its discretion to continue the ad valorem property tax rate for fiscal years 2016/17 and 2017/18 at the tax rate levied in fiscal years 2015/16 (.0035 percent of assessed valuation, excluding annexation levies); and
- 3. Waives compliance with Section 4301(b) of Metropolitan's Administrative Code for any tax levy that utilizes this suspension of Section 124.5 of the Act.

I HEREBY CERTIFY that the foregoing is a full, true, and correct copy of a resolution of the Board of Directors of The Metropolitan Water District of Southern California, adopted at its meeting held April 12, 2016.

Secretary of the Board of Directors of The Metropolitan Water District of Southern California

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

RESOLUTION 9208

RESOLUTION OF THE BOARD OF DIRECTORS OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA CONTINUING THE WATER STANDBY CHARGE FOR FISCAL YEAR 2016/17

WHEREAS, at its meeting on April 14, 2015, the Board adopted Resolution 9188, "Resolution of the Board of Directors of The Metropolitan Water District of Southern California Fixing and Adopting Readiness- to-Serve-Charge for Calendar Year 2016";

WHEREAS, at its meeting on April 12, 2016, the Board adopted Resolution 9204, "Resolution of the Board of Directors of The Metropolitan Water District of Southern California Fixing and Adopting Readiness-to-Serve-Charge for Calendar Year 2017";

WHEREAS, certain member public agencies of Metropolitan have elected to pay all or a portion of their Readiness-to-Serve Charge obligation through the continuance of the Metropolitan water standby charge ("Standby Charge") collected from parcels within those member agencies;

WHEREAS, Metropolitan is willing to comply with the requests of member public agencies opting to have Metropolitan continue to collect the Standby Charge within their respective territories, on the terms and subject to the conditions contained herein;

WHEREAS, Section 134.5 of the Metropolitan Water District Act authorizes the Board to collect a service charge from member agencies or, as an alternative, to impose a service charge as a standby charge against individual parcels within the district;

WHEREAS, Metropolitan first established the Standby Charge in 1992, pursuant to the procedures authorized by Section 134.5 of the Metropolitan Water District Act and the Uniform Standby Charge Procedures Act ("USCPA"), Sections 54984-54984.9, inclusive, of the Government Code;

WHEREAS, the Standby Charge has remained at the same rate since fiscal year 1993/94, and in fiscal year 1995/96 was reduced to \$0.00 for the member agencies electing not to have any portion of their Readiness-to-Serve Charge obligation collected through the Standby Charge;

WHEREAS, the Standby Charge is not subject to the procedures set forth in Article XIII D, Section 4 of the California Constitution effective July 1, 1997 (Proposition 218), as the Standby Charge has remained at the same rate since fiscal year 1993/94 and the proceeds of the Standby Charge are used for purposes specified in Section 5 of Article XIII D; and

WHEREAS, the particular charge, per acre or per parcel, applicable to land within each member public agency, the method of its calculation, and the specific data used in its determination are as specified in the Engineer's Report dated April 2016, supporting the Readiness-to-Serve Charge and Standby Charge option (the "Engineer's Report"), which is on file with the Board Executive Secretary of Metropolitan.

NOW THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California does hereby resolve, determine and order as follows:

Section 1. That the Board of Directors of Metropolitan, pursuant to the Engineer's Report, finds that lands within Metropolitan are benefited as described in such report and on that basis, hereby continues its Standby Charge for fiscal year 2016/17 on land within requesting member agencies of Metropolitan to which water is made available for any purpose, whether water is actually used or not, as specified in the Engineer's Report.

Section 2. That the rates of such Standby Charge, per acre of land, or per parcel of land less than an acre, as shown in the Engineer's Report, may vary by member public agency, and shall not exceed the amount of the 1995/96 Standby Charge for the member public agency. The Standby Charge applicable to each electing member public agency, the method of its calculation, and the specific data used in its determination are as specified in the Engineer's Report which was prepared by a registered professional engineer certified by the state of California, which methodology is in accordance with Section 134.5 of the Metropolitan Water District Act.

Section 3. That the Standby Charge, per parcel or per acre, applicable to land within each electing member public agency as allocated in the Engineer's Report shall be as follows:

2016/17 Water Standby Charge

Member Agency	Amount
Anaheim	\$8.55
Beverly Hills	-0-
Burbank	14.20
Calleguas MWD	9.58
Central Basin MWD	10.44
Inland Empire Utilities Agency	7.59
Coastal MWD*	11.60
Compton	8.92
Eastern MWD	6.94
Foothill MWD	10.28
Fullerton	10.71
Glendale	12.23
Las Virgenes MWD	8.03
Long Beach	12.16
Los Angeles	-0-
MWD of Orange Co."	10.09
Pasadena	11.73
San Diego CWA	11.51
San Fernando	7.87
San Marino	8.24
Santa Ana	7.88
Santa Monica	-0-
Three Valleys MWD	12.21
Torrance	12.23
Upper San Gabriel Valley MWD	9.27
West Basin MWD	-0-
Western MWD of Riverside Co.	9.23

^{*}Applicable to parcels included within territory of former Coastal MWD.

^{**}Exclusive of parcels included within territory of former Coastal MWD.

Section 4. That the Standby Charge shall continue to be collected on the tax rolls, together with the ad valorem property taxes that are levied by Metropolitan for the payment of pre-1978 voter approved indebtedness. Standby charges so collected shall be applied as a credit against the applicable member agency's obligation to pay its Readiness-to-Serve Charge. After such member agency's Readiness-to-Serve Charge allocation is fully satisfied, any additional collections shall be credited to other outstanding obligations of such member agency to Metropolitan that may be paid by the Standby Charge or future readiness-to-serve obligations of such agency as set forth in Section 6. Any member agency requesting to have all or a portion of its Readiness-to-Serve Charge obligation collected through the Standby Charge levy within its territory as provided herein shall pay any portion not collected through net Standby Charge collections to Metropolitan within fifty (50) days after Metropolitan issues an invoice for the remaining Readiness-to-Serve Charge to such member agency, as provided in Administrative Code Section 4507.

Section 5. That the following exemption procedures apply:

- (a) It is the intent of the Board that the following lands shall be exempt from the Standby Charge: (1) lands owned by the Government of the United States, the state of California, or by any political subdivision thereof or any entity of local government; (2) lands permanently committed to open space and maintained in their natural state that are not now and will not in the future be supplied water; (3) lands not included in (1) or (2) above, which the General Manager, in his discretion, finds do not now and cannot reasonably be expected to derive a benefit from the projects to which the proceeds of the Standby Charge will be applied; and (4) lands within any member public agency, subagency, or city if the governing body of such public entity elects and commits to pay out of funds available for that purpose, in installments at the time and in the amounts established by Metropolitan, the entire amount of the Standby Charge which would otherwise be collected from lands within those public entities. However, no exemption from the Standby Charge shall reduce the applicable member agency's Readiness-to-Serve Charge obligation. The General Manager may develop and implement additional criteria and guidelines for exemptions in order to effectuate the intent expressed herein.
- (b) The General Manager shall establish and make available to interested applicants procedures for filing and consideration of applications for exemption from the Standby Charge pursuant to subsections (2) and (3) of Section 5(a) above. All applications for such exemption and documents supporting such claims must be received by Metropolitan in writing on or before December 31, 2016. The General Manager is further directed to review any such applications for exemption submitted in a timely manner to determine whether the lands to which they pertain are eligible for such exemption and to allow or disallow such applications based upon those guidelines. The General Manager shall also establish reasonable procedures for the filing and timing of the appeals from his determination.
- (c) The Finance and Insurance Committee of Metropolitan's Board of Directors shall hear appeals from determinations by the General Manager to deny or qualify an application for exemption from the Standby Charge. The Finance and Insurance Committee shall consider such appeals and make recommendations to the Board to affirm or reverse the General Manager's determinations. The Board shall act upon such recommendations and its decision as to such appeals shall be final.

Section 6. That no exemption from the Standby Charge shall reduce the applicable member agency's Readiness-to-Serve Charge obligation, nor shall any failure to collect, or any delay in collecting, any Standby Charge excuse or delay payment of any portion of the Readiness-to-Serve Charge when due. All amounts collected as the Standby Charge pursuant to this Resolution shall be applied solely as credits to the Readiness-to-Serve Charge of the applicable member agency, with any excess collections being carried forward and credited against future Readiness-to-Serve Charge obligations of such member agency to Metropolitan or, if crediting against future Readiness-to-Serve Charge obligations of a member agency to Metropolitan proves to be impracticable, may be transmitted to the member agency for application solely to finance the capital costs or maintenance and operation expenses of water projects of benefit to properties within the member agency.

Section 7. That the Readiness-to-Serve Charge is collected by Metropolitan as a rate, fee or charge from its member agencies, and is not a fee or charge imposed upon real property or upon persons as incidents of property ownership, and the Standby Charge is collected within the respective territories of electing member agencies as a mechanism for collection of the Readiness-to-Serve Charge. In the event that the Standby Charge, any portion thereof, or the collection of the Standby Charge, is determined to be an unauthorized or invalid fee, charge or assessment by a final judgment in any proceeding at law or in equity, which judgment is not subject to appeal, or if the collection of the Standby Charge shall be permanently enjoined and appeals of such injunction have been declined or exhausted, or if Metropolitan shall determine to rescind or revoke the Standby Charge, then no further Standby Charge shall be collected within any member agency and each member agency which has requested the continuation of the Metropolitan Standby Charge as a means of collecting its Readiness-to-Serve Charge obligation shall pay such Readiness-to-Serve Charge obligation in full, as if such Standby Charge had never been sought.

Section 8. That the General Manager is hereby authorized and directed to take all necessary action to secure the collection of the Standby Charge by the appropriate county officials, including payment of the reasonable cost of collection.

Section 9. That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

Section 10. That this Board finds that the continuation of the charge provided in this Resolution is not defined as a Project under the provisions of the California Environmental Quality Act ("CEQA") since it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

Section 11. That if any provision of this Resolution or the application to any member agency, property or person whatsoever is held invalid, that invalidity shall not affect other provisions or applications of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on May 10, 2016.

Secretary of the Board of Directors of The Metropolitan Water District of Southern California

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

