



• Review of Blue Ribbon Review Committee Report

Summary

This is a report summarizing the Blue Ribbon Review Committee (BRRC) review of the 22 recommended next steps identified in the Blue Ribbon Committee (BRC) April 12, 2011 report for Metropolitan Board consideration.

Attachments

[**Attachment 1:**](#) Review of the Blue Ribbon Committee Recommended Next Steps, Prepared for the Blue Ribbon Review Committee, December 12, 2011

Detailed Report

In April 2011, the Blue Ribbon Committee (BRC) submitted a report to the Metropolitan Board with a vision for Metropolitan in 2060. The BRC identified 22 potential next steps Metropolitan's Board could consider in moving towards the BRC's 2060 vision. In July 2011, the Board established the Blue Ribbon Review Committee (BRRC) to discuss and respond to the recommendations in the BRC report. [**Attachment 1**](#) is a report on the BRRC review of the BRC recommended next steps incorporating the comments received at the November 7, 2011 BRRC meeting.

REVIEW OF THE BLUE RIBBON COMMITTEE RECOMMENDED NEXT STEPS

Prepared by the

BLUE RIBBON REVIEW COMMITTEE

December 12, 2011

Executive Summary

This report presents a review by the Blue Ribbon Review Committee (BRRC) of the 22 recommended next steps identified by the Blue Ribbon Committee (BRC) in their April 2011 report entitled “Report of the Blue Ribbon Committee, The Metropolitan Water District of Southern California” (BRC Report)¹. The BRRC also identifies and recommends appropriate follow-up actions to address the BRC next steps.

Metropolitan’s Board established the BRC in February 2010 to make recommendations for new business models and strategies for Metropolitan. The BRC consisted of 27 experts from the region representing diverse fields and backgrounds. Thereafter, the Board entered into an agreement with the RAND Corporation to provide external expertise in facilitation and research to support the BRC. The BRC met 17 times as a full group with open public meetings. Additionally, the BRC divided into six working groups to study the following six focus areas as key components in Metropolitan’s future, as identified by the Board:

- Developing new water options for Southern California
- Energy for the future
- Economic development and technologies
- Financial sustainability
- Workforce
- Communications

In the BRC Report findings, the BRC identified Metropolitan’s “value proposition” to its members as “...acting on its members’ behalf to do what they could not do alone.” The prime example of this “value proposition” is the establishment of Metropolitan to provide its member agencies with imported water from the Colorado River – something the member agencies could not have obtained acting independently of one another. Further, the BRC found that Metropolitan has adjusted its business model and operations throughout its history to respond to changing conditions of water demand, water availability, and regulatory constraints to ensure long-term water supply reliability. Nonetheless, the BRC also found that continued future change and variability will substantially affect Metropolitan’s ability to continue to remain a reliable provider of services to its members. As a result, the BRC recommended a 2060 Metropolitan business model and identified 22 next steps to help Metropolitan reach this business model. A summary of the BRC’s recommendations is presented in Table 1, including Metropolitan’s current business model, the BRC recommended 2060 business model, and the BRC recommended next steps needed to get to 2060. These BRC recommendations are reproduced from Table S.5 and Table S.6 in the Executive Summary of the BRC Report. Metropolitan staff has assigned a number to each of the 22 next steps for the purposes of the BRRC review, analysis, and recommendations.

In July 2011, the Board established the BRRC to review the BRC recommended next steps and identify follow-up actions that may be necessary for the appropriate standing committees. Each next step was evaluated by the BRRC in the following four categories:

- Applicable policies
- Implementation processes
- Standing committees that may address the next step
- Summary of current efforts

¹ The Report of the Blue Ribbon Committee is available on MWDh2o.com ([BRC Report](#)) or by going directly to <http://mwdh2o.com/BlueRibbon/pdfs/BRCreport4-12-2011.pdf>

A summary of the BRRC evaluation of the BRC next steps regarding applicable policies, implementation processes, and identified standing committees is included as Table 2. Detailed analyses for each of the 22 next steps are included in Appendix 1.

The BRRC developed the following general recommendations regarding the BRC next steps:

- The identified standing committees shall be responsible for assessing or implementing each of the BRC next steps.
- For those next steps that do have existing board-adopted policies, the identified standing committees shall be responsible for reviewing the effectiveness of such policies.
- For those next steps that do not have existing board-adopted policies, the identified standing committees shall consider whether development of new policies is warranted.
- The identified standing committees shall guide their assessment or implementation of each next step using the BRRC next step analyses, recommendations, and priorities contained within this report.
- The identified standing committees shall include regular updates on the next step assessment or implementation within their committee agendas.
- Staff shall prepare a report on the progress of the standing committees after two years.

Table 3 presents a summary of the BRRC recommendations for identified standing committees to address each of the BRC next steps and the BRRC recommended priority for assessment – within 6 months, 12 months, or 18 months.

With the submittal of these recommendations by the BRRC to the Board, the business of the BRRC is complete.

Organization of the Report

This report has been organized under the following headings:

- **Background** – *a brief history on the establishment of both the BRC and the BRRC*
- **Blue Ribbon Committee** – *a more detailed history on the BRC, including its purpose and approach, its findings on Metropolitan's current business model, and its recommendation for a 2060 Metropolitan business model*
- **Blue Ribbon Review Committee** – *a more detailed history of the BRRC and its processes for reviewing the BRC Report*
- **Blue Ribbon Review Committee Evaluation Approach of the 22 Next Steps** – *a description of the four BRRC evaluation categories: applicable policies, implementation processes, standing committee that may address the next step, and current efforts*
- **BRRC Findings and Recommendations** – *the BRRC findings and recommendations for each of the BRC next steps*
- **Appendix 1** – *the analysis for each of the BRC next steps*

Table 1
Blue Ribbon Committee Report Recommendations

Key Business Model Elements	Metropolitan 2011	Metropolitan 2060	Next Steps
Customer Demand <i>Helping customers become wise water users</i>	<ul style="list-style-type: none"> Develop new imported supplies to meet growing demand Moderate demand through conservation programs and subsidies to members 	<ul style="list-style-type: none"> Meet growing demand through co-development (with member agencies and private sector) of an increasingly diverse mix of water Moderate demand through proactive demand-management policies, including pricing and direct investment in efficiency programs 	<ol style="list-style-type: none"> Evaluate selected demand-management programs in the United States and abroad to assess efficacy for testing and possible deployment Develop and implement proactive communication strategies among members and the public to improve their understanding of the value of water and new actions to manage demand Expand public education through investment in long-term campaigns targeting youth over the span of a generation to increase knowledge and support workforce development
Diversified water portfolio and investments <i>Security through diversity</i>	<ul style="list-style-type: none"> Provide imported water from CRA and SWP to supply about 50 percent of the region's supplies Purchase supplemental supplies from agricultural users 	<ul style="list-style-type: none"> Provide imported water from the CRA and the SWP Make additional purchases of imported water Increase region's local supplies by more than 50 percent 	<ol style="list-style-type: none"> Endorse Metropolitan's continued lead role in development of the Bay Delta Conservation Plan and related processes Support California's efforts to work collaboratively with others to use its full share of water from the Colorado River at the least cost

Note: Entries in **bold** represent enhancements or additions in the Metropolitan 2060 model.

Source: Table S.5 and Table S.6 in Executive Summary of "Report of the Blue Ribbon Committee, The Metropolitan Water District of Southern California" April 12, 2011

Table 1
Blue Ribbon Committee Report Recommendations

Key Business Model Elements	Metropolitan 2011	Metropolitan 2060	Next Steps
	<ul style="list-style-type: none"> • Provide 1.5 MAF of regional surface storage • Subsidize local supply projects through the LRP 	<ul style="list-style-type: none"> • Increase Metropolitan investment in some local production • Increase regional groundwater and small-scale surface storage • Exploit energy resources through partnership or other means for cost savings and diversification of revenue 	<ol style="list-style-type: none"> 6. Evaluate the LRP and consider its benefits and costs relative to alternative approaches for encouraging regional investments in local supplies; support the direction of the IRP in encouraging partnerships to increase local supply development
			<ol style="list-style-type: none"> 7. Consider co-development of unsubsidized pilot projects demonstrating the viability of medium-scale local supply development
			<ol style="list-style-type: none"> 8. Accelerate assessments of costs and benefits of expanding small, distributed surface storage and expanded groundwater storage in the region
			<ol style="list-style-type: none"> 9. Invest in new out-of-basin agricultural water sources and water from conservation investments
			<ol style="list-style-type: none"> 10. Develop strategy for exploiting Metropolitan's energy resources in the form of partnerships and funding opportunities for energy efficiency, energy reliability, and greenhouse-gas emission reductions

Note: Entries in **bold** represent enhancements or additions in the Metropolitan 2060 model.

Source: Table S.5 and Table S.6 in Executive Summary of "Report of the Blue Ribbon Committee, The Metropolitan Water District of Southern California" April 12, 2011

Table 1
Blue Ribbon Committee Report Recommendations

Key Business Model Elements	Metropolitan 2011	Metropolitan 2060	Next Steps
Provider of integrated water services <i>A “grid” for water</i>	<ul style="list-style-type: none"> • Lead IRP process • Communicate with public • Develop workforce to meet projected needs 	<ul style="list-style-type: none"> • Lead IRP process • Increase communications with public and other audiences • Develop advanced workforce to meet needs of new model • Provide interregional storage and conveyance infrastructure • Facilitate transfers and trades • Co-finance conservation and local production 	<ol style="list-style-type: none"> 11. Identify potential major elements of a more-regionally connected system—including a review of previous studies of groundwater storage-system potential—and identify gaps in regional conveyance and storage capacity 12. Expand planning partners to include wastewater, flood control, and other agencies 13. Build capabilities to analyze the economics of integrated water-resource planning and management for the region 14. Evaluate the potential benefits, costs, and constraints for water trading among members, including the implementation of several pilot projects

Note: Entries in **bold** represent enhancements or additions in the Metropolitan 2060 model.

Source: Table S.5 and Table S.6 in Executive Summary of “Report of the Blue Ribbon Committee, The Metropolitan Water District of Southern California” April 12, 2011

Table 1
Blue Ribbon Committee Report Recommendations

Key Business Model Elements	Metropolitan 2011	Metropolitan 2060	Next Steps
Finances and pricing <i>Conserve and sustain</i>	<ul style="list-style-type: none"> • Generate 80 percent of revenues from water sales, 20 percent from fixed charges and property tax • Employ average-cost pricing • Apply limited two-tiered tariff • Offer limited unbundling • Subsidize conservation and some local production 	<ul style="list-style-type: none"> • Better align revenues with fixed and variable costs • Make revenue less dependent on sales of imports • Set prices to incentivize conservation and local production • Generate revenues from transfers, trading, and investments in local production 	15. Develop an adaptive long-range financial plan as a complement to the IRP 16. Initiate a process to review the current pricing structure in comparison to potential alternatives, evaluating the sustainability of the various options under a range of scenarios 17. Review all major cost components and apply value-engineering principles to the process of identifying opportunities for cost savings
Governance and operations	<ul style="list-style-type: none"> • Operate as a cooperative among member agencies 	<ul style="list-style-type: none"> • Operate as a cooperative among member agencies • Enter into partnerships with small groups of members and other regional organizations • Lead in creating a new work force for 21st century • Lead proactive consumer-oriented communications to support conservation and efficiency 	18. Initiate an external review of governance structure 19. Begin a process to considering [sic] changes to the existing vision and mission statements

Note: Entries in **bold** represent enhancements or additions in the Metropolitan 2060 model.

Source: Table S.5 and Table S.6 in Executive Summary of “Report of the Blue Ribbon Committee, The Metropolitan Water District of Southern California” April 12, 2011

Table 1
Blue Ribbon Committee Report Recommendations

Key Business Model Elements	Metropolitan 2011	Metropolitan 2060	Next Steps
Leadership in technology and workforce development <i>Catalyst for innovation</i>	<ul style="list-style-type: none"> Not an explicit part of the 2011 business model 	<ul style="list-style-type: none"> Increase visibility and catalytic role in technology development for improved efficiency and other purposes Lead regional efforts to develop, train, and retain a highly-skilled and flexible workforce that reflects the region's diversity. 	<ol style="list-style-type: none"> Brand Metropolitan as a global leader on efficient and innovative water management and technologies Consider different types of opportunities for taking a lead role in fostering a water service and technology innovative region Begin a strategic planning process to assess needs and actions to shape a workforce that meets the needs of new business model, including new training and development programs to increase qualified personnel to meet workforce needs and reflect the region's diversity

Note: Entries in **bold** represent enhancements or additions in the Metropolitan 2060 model.

Source: Table S.5 and Table S.6 in Executive Summary of "Report of the Blue Ribbon Committee, The Metropolitan Water District of Southern California" April 12, 2011

Table 2
Summary Evaluation of Blue Ribbon Committee Next Steps

BRC Next Step	Applicable Policy		Implementation Process		Standing Committee
	Yes	No	Yes	No	
Customer Demand					
1 Evaluate selected demand-management programs in the United States and abroad to assess efficacy for testing and possible deployment	X		X		WP&S
2 Develop and implement proactive communication strategies among members and the public to improve their understanding of the value of water and new actions to manage demand	X		X		C&L
3 Expand public education through investment in long-term campaigns targeting youth over the span of a generation to increase knowledge and support workforce development	X		X		C&L OP&T
Diversified Water Portfolio and Investments					
4 Endorse Metropolitan's continued lead role in development of the Bay Delta Conservation Plan and related processes	X		X		WP&S
5 Support California's efforts to work collaboratively with others to use its full share of water from the Colorado River at the least cost	X		X		WP&S
6 Evaluate the LRP and consider its benefits and costs relative to alternative approaches for encouraging regional investments in local supplies; support the direction of the IRP in encouraging partnerships to increase local supply development	X		X		WP&S
7 Consider co-development of unsubsidized pilot projects demonstrating the viability of medium-scale local supply development	X		X		WP&S
8 Accelerate assessments of costs and benefits of expanding small, distributed surface storage and expanded groundwater storage in the region	X		X		WP&S
9 Invest in new out-of-basin agricultural water sources and water from conservation investments	X		X		WP&S
10 Develop strategy for exploiting Metropolitan's energy resources in the form of partnerships and funding opportunities for energy efficiency, energy reliability, and greenhouse-gas emission reductions	X		X		E&O RP&AM
Provider of Integrated Water Services					
11 Identify potential major elements of a more regionally connected system—including a review of previous studies of groundwater storage-system potential—and identify gaps in regional conveyance and storage capacity	X		X		E&O WP&S
12 Expand planning partners to include wastewater, flood control, and other agencies	X		X		WP&S

Note: Communication & Legislation (C&L); Engineering & Operations (E&O); Executive (Exec); Finance & Insurance (F&I); Operations, Personnel, & Technology (OPT); Real Property & Asset Management (RP&AM); Water Planning & Stewardship (WP&S).

Table 2
Summary Evaluation of Blue Ribbon Committee Next Steps

BRC Next Step	Applicable Policy		Implementation Process		Standing Committee
	Yes	No	Yes	No	
13 Build capabilities to analyze the economics of integrated water-resource planning and management for the region	X		X		F&I WP&S
14 Evaluate the potential benefits, costs, and constraints for water trading among members, including the implementation of several pilot projects		X		X	F&I
Finances and Pricing					
15 Develop an adaptive long-range financial plan as a complement to the IRP	X		X		F&I
16 Initiate a process to review the current pricing structure in comparison to potential alternatives, evaluating the sustainability of the various options under a range of scenarios	X		X		F&I
17 Review all major cost components and apply value-engineering principles to the process of identifying opportunities for cost savings	X		X		E&O F&I
Governance and Operations					
18 Initiate an external review of governance structure		X		X	EXEC
19 Begin a process to considering changes to the existing vision and mission statements	X		X		EXEC
Technology, Workforce Development					
20 Brand Metropolitan as a global leader on efficient and innovative water management and technologies	X		X		C&L
21 Consider different types of opportunities for taking a lead role in fostering a water service and technology innovative region	X		X		E&O OP&T WP&S
22 Begin a strategic planning process to assess needs and actions to shape a workforce that meets the needs of the new business model, including new training and development programs to increase qualified personnel to meet workforce needs and reflect the region's diversity	X		X		OP&T

Table 3
BRRC Recommendations for Standing Committee to Address Next Steps

Standing Committee	Next Step	BRC Next Step	BRRC Recommendations	Priority for Assessment
EXEC	18	Initiate an external review of governance structure	<ul style="list-style-type: none"> The Committee should determine whether there is a need to review Metropolitan's governance structure, including the composition of the Board, by-laws and other elements identified by the Board as essential to its functioning. If the need for a review is determined, the Committee should decide on the external reviewer, scope, process, and timeframe of the effort. 	within 18 months
EXEC	19	Begin a process to consider changes to the existing vision and mission statements	<ul style="list-style-type: none"> The Committee should determine whether there is a need to review Metropolitan's mission statement at this time. The Committee should decide whether to develop a formal vision statement. 	within 6 months within 6 months
C&L	2	Develop and implement proactive communication strategies among members and the public to improve their understanding of the value of water and new actions to manage demand	<ul style="list-style-type: none"> The Committee should continue to oversee and guide staff in the development of communication strategies. The Committee should evaluate the effectiveness of various communication strategies currently in use. The Committee should direct staff to incorporate evolving technologies into communication strategies. 	within 6 months within 6 months within 12 months
C&L	3	Expand public education through investment in long-term campaigns targeting youth over the span of a generation to increase knowledge and support workforce development	<ul style="list-style-type: none"> The Committee should continue to evaluate the effectiveness of Metropolitan's education programs and communication strategies in influencing lifestyle and behavioral changes, public attitudes about the value of water, and the critical value of supporting infrastructure maintenance and development. 	within 12 months
C&L	20	Brand Metropolitan as a global leader on efficient and innovative water management and technologies	<ul style="list-style-type: none"> The Committee should continue to oversee Metropolitan's outreach and education efforts. 	within 6 months

Table 3
BRRC Recommendations for Standing Committee to Address Next Steps

Standing Committee	Next Step	BCR Next Step	BRRC Recommendations	Priority for Assessment
E&O	10	Develop strategy for exploiting Metropolitan's energy resources in the form of partnerships and funding opportunities for energy efficiency, energy reliability, and greenhouse-gas emission reductions	<ul style="list-style-type: none"> The Committee should continue to oversee the implementation of the Energy Management Policy to ensure benefits from cost-effective and sustainable energy projects and programs. 	within 6 months
E&O	11	Identify potential major elements of a more regionally connected system—including a review of previous studies of groundwater storage-system potential—and identify gaps in regional conveyance and storage capacity	<ul style="list-style-type: none"> The Committee should determine whether Metropolitan should take further steps to evaluate the potential of enhancing regional connectivity of its water distribution system when facility improvements are being studied. 	within 18 months
E&O	17	Review all major cost components and apply value-engineering principles to the process of identifying opportunities for cost savings	<ul style="list-style-type: none"> The Committee should continue to oversee and ensure a vigorous application of value-engineering principles. The Committee should receive periodic staff updates on assessments of operations to ensure compliance and reduce costs. 	within 6 months within 6 months
E&O	21	Consider different types of opportunities for taking a lead role in fostering a water service and technology innovative region	<ul style="list-style-type: none"> The Committee should continue to ensure staff considers innovative approaches and collaborates with others to develop new technologies for infrastructure construction, monitoring, repair, rehabilitation, water quality treatment, compliance with drinking water regulations, and energy management. 	within 12 months
F&I	13	Build capabilities to analyze the economics of integrated water-resource planning and management for the region	<ul style="list-style-type: none"> The Committee should continue to ensure adequate economic analysis is performed for implementing the IRP. 	within 18 months
F&I	14	Evaluate the potential benefits, costs, and constraints for water trading among members, including the implementation of several pilot projects	<ul style="list-style-type: none"> The Committee should continue to oversee the Rate Refinement Process and evaluate any recommendations on trading of Tier 1 access among member agencies. 	within 12 months
F&I	15	Develop an adaptive long-range financial plan as a complement to the IRP	<ul style="list-style-type: none"> The Committee should continue to oversee the development of the Long Range Finance Plan. 	within 18 months

Table 3
BRRC Recommendations for Standing Committee to Address Next Steps

Standing Committee	Next Step	BRC Next Step	BRRC Recommendations	Priority for Assessment
F&I	16	Initiate a process to review the current pricing structure in comparison to potential alternatives, evaluating the sustainability of the various options under a range of scenarios	<ul style="list-style-type: none"> The Committee should continue to oversee the Rate Refinement Process and the balance between fixed and variable revenues. 	within 12 months
F&I	17	Review all major cost components and apply value-engineering principles to the process of identifying opportunities for cost savings	<ul style="list-style-type: none"> The Committee should continue to oversee the Budget Process and Capital Investment Plan. 	within 6 months
OP&T	3	Expand public education through investment in long-term campaigns targeting youth over the span of a generation to increase knowledge and support workforce development	<ul style="list-style-type: none"> The Committee should continue to oversee implementation of the Strategic HR Plan. In the implementation of the Strategic HR plan, the Committee should ensure staff collaborates with other water agencies to share resources and address future workforce challenges. 	within 6 months within 6 months
OP&T	21	Consider different types of opportunities for taking a lead role in fostering a water service and technology innovative region	<ul style="list-style-type: none"> The Committee should continue to oversee the use of information technology to manage Metropolitan's business and operations. The Committee should continue to evaluate information technology advances and their application to Metropolitan. 	within 6 months within 6 months
OP&T	22	Begin a strategic planning process to assess needs and actions to shape a workforce that meets the needs of the new business model, including new training and development programs to increase qualified personnel to meet workforce needs and reflect the region's diversity	<ul style="list-style-type: none"> The Committee should continue to oversee the implementation of the Strategic HR Plan and talent management strategy. 	within 6 months
RP&AM	10	Develop strategy for exploiting Metropolitan's energy resources in the form of partnerships and funding opportunities for energy efficiency, energy reliability, and greenhouse-gas emission reductions	<ul style="list-style-type: none"> The Committee should continue to oversee the property leasing program to maximize benefits to Metropolitan's core mission. 	within 6 months

Table 3
BRRC Recommendations for Standing Committee to Address Next Steps

Standing Committee	Next Step	BRC Next Step	BRRC Recommendations	Priority for Assessment
WP&S	1	Evaluate selected demand-management programs in the United States and abroad to assess efficacy for testing and possible deployment	<ul style="list-style-type: none"> The Committee should continue its oversight on the implementation of the Long Term Conservation Plan. The Committee should direct staff to develop a report on demand-management practices being implemented nationally and globally that may be feasible for Metropolitan's service area and provide any recommendations for pilot testing projects. 	within 6 months within 12 months
WP&S	4	Endorse Metropolitan's continued lead role in development of the Bay Delta Conservation Plan and related processes	<ul style="list-style-type: none"> The Committee should continue its oversight on the implementation of the Bay Delta Conservation Plan and related processes. 	within 6 months
WP&S	5	Support California's efforts to work collaboratively with others to use its full share of water from the Colorado River at the least cost	<ul style="list-style-type: none"> The Committee should continue its oversight on the management of supplies from the Colorado River and develop programs to maintain a full Colorado River Aqueduct during dry years when needed as a core strategy for Metropolitan to achieve long-term water supply reliability. 	within 6 months
WP&S	6	Evaluate the LRP and consider its benefits and costs relative to alternative approaches for encouraging regional investments in local supplies; support the direction of the IRP in encouraging partnerships to increase local supply development	<ul style="list-style-type: none"> The Committee should continue to evaluate recommendations from the Local Resources Development Strategy Task Force and direct staff to implement the appropriate next steps. 	within 6 months
WP&S	7	Consider co-development of unsubsidized pilot projects demonstrating the viability of medium-scale local supply development	<ul style="list-style-type: none"> The Committee should direct staff to develop criteria and an implementation process for evaluating low-regret, low-risk actions, including feasibility studies, demonstration and pilot projects. 	within 12 months
WP&S	8	Accelerate assessments of costs and benefits of expanding small, distributed surface storage and expanded groundwater storage in the region	<ul style="list-style-type: none"> The Committee should continue to evaluate recommendations from the Replenishment Workgroup and direct staff to implement the appropriate next steps. 	within 6 months

Table 3
BRRC Recommendations for Standing Committee to Address Next Steps

Standing Committee	Next Step	BRC Next Step	BRRC Recommendations	Priority for Assessment
WP&S	9	Invest in new out-of-basin agricultural water sources and water from conservation investments	<ul style="list-style-type: none"> The Committee should continue to evaluate opportunities that are economically and environmentally responsible. 	within 12 months
WP&S	11	Identify potential major elements of a more regionally connected system—including a review of previous studies of groundwater storage-system potential—and identify gaps in regional conveyance and storage capacity	<ul style="list-style-type: none"> The Committee should determine whether Metropolitan should take further steps to evaluate the potential of enhancing regional connectivity of its water distribution system when evaluating different portfolios of local and imported water supplies. 	within 18 months
WP&S	12	Expand planning partners to include wastewater, flood control, and other agencies	<ul style="list-style-type: none"> The Committee should determine whether there is a need to develop an explicit policy to guide staff in expanding collaborative planning efforts. 	within 12 months
WP&S	13	Build capabilities to analyze the economics of integrated water-resource planning and management for the region	<ul style="list-style-type: none"> The Committee should continue to ensure adequate economic analysis is performed for implementing the IRP. 	within 18 months
WP&S	21	Consider different types of opportunities for taking a lead role in fostering a water service and technology innovative region	<ul style="list-style-type: none"> The Committee should continue to ensure staff considers innovative approaches and collaborates with others to develop new technologies to promote water use efficiency and integrated water resources planning. 	within 6 months

Background

In February 2010, Metropolitan's Board established the BRC to make recommendations for new business models and strategies for Metropolitan. The BRC published their April 2011 report entitled, "Report of the Blue Ribbon Committee, The Metropolitan Water District of Southern California" (BRC Report)², recommending 22 next steps for Metropolitan's Board to consider in moving towards the BRC's 2060 vision for Metropolitan. In July 2011, the Board established the BRRC to review the BRC next steps, and to identify and recommend appropriate follow-up actions.

Blue Ribbon Committee

In November 2009, Metropolitan's Board held a retreat entitled "MWD 2060: Building a Sustainable Future" wherein those Board members present supported the establishment of the BRC. The BRC would be composed of experts who would provide insight into the global, natural, economic, and demographic changes that Metropolitan's service area would encounter in the future and assist Metropolitan in the development of a new business model and strategies for the future. In February 2010, the Board ratified the BRC membership and established the mission and focus for the BRC, specifically the following six focus areas as key components in Metropolitan's future:

- Developing new water options for Southern California
- Energy for the future
- Economic development and technologies
- Financial sustainability
- Workforce
- Communications

In March 2010, the Board entered into an agreement with the RAND Corporation to provide external expertise in facilitation and research to support the BRC. The BRC consisted of 27 experts from the region representing diverse fields and backgrounds, including the public sector, the private sector, research institutes, universities, environmental advocacy groups, business advocacy groups, labor advocacy groups, chambers of commerce, private citizens, and various interested nongovernmental organizations. The BRC met 17 times as a full group in open public meetings from March 2010 to April 2011, welcoming public comments on its deliberations and draft documents. Additionally, during the summer of 2010, the BRC divided into six working groups corresponding to the above noted six focus areas. Five of these six working groups produced position papers that were made available on the BRC Web page³ available on Metropolitan's website. Additionally, the BRC Web page provided links to all reference documents, meeting schedules, meeting materials, committee rosters, committee member biographies, and contact information, as well as the final BRC report.

Purpose and Approach of the Blue Ribbon Committee

In February 2010, the Board adopted the following mission statement for the BRC:

"The mission of the Metropolitan Water District's 2060 Blue Ribbon Committee (BRC) is to make recommendations for new business models and strategies to position Metropolitan to meet our region's water related needs and to provide for sustainability for Southern California in coming decades. The Committee will consider the best practices in California, in our nation and around the world for innovatively and effectively managing energy and water infrastructure. The intent is to identify the best strategies and practices and to use them to foster environmental stewardship, water reliability and new sources of competitive advantage for Southern California."

² The Report of the Blue Ribbon Committee is available on MWDh2o.com ([BRC Report](#)) or by going directly to <http://mwdh2o.com/BlueRibbon/pdfs/BRCreport4-12-2011.pdf>

³ Position papers are available on MWDh2o.com ([BRC Position Papers](#)) or by going directly to <http://www.mwdh2o.com/BlueRibbon/index.shtml>

The Board requested the BRC to conceptualize a vision of Metropolitan's business model in 2060 that would lead to continued success in the region over a range of possible futures. As stated in the Report, the Board specifically asked the BRC to do the following:

- Focus on the strategic trends likely to affect Metropolitan in the future and vital to the region's sustainability.
- Consider best practices in California, in the nation, and around the world for innovatively and effectively managing energy and water infrastructure, with the intent of identifying the best strategies and practices and using them to foster environmental stewardship, water reliability, and new sources of competitive advantage for Southern California.
- Make recommendations for a new business model and strategies to position Metropolitan and its member agencies to meet the region's water-related needs and provide for sustainability for Southern California in coming decades.

The BRC approach for the study included:

- Reviewing Metropolitan's current business model and Metropolitan's current value to its member agencies.
- Identifying factors that could affect Metropolitan's business model in the future.
- Developing a vision of Metropolitan's business model in 2060 and Metropolitan's value in 2060 to its member agencies under this 2060 business model.
- Comparing the 2011 and 2060 business models.
- Identifying the steps needed to get to the 2060 business model.

Blue Ribbon Committee Findings on Metropolitan's Current Business Model

The BRC reiterated that Metropolitan was established to provide its member agencies with imported water from the Colorado River that the member agencies could not have obtained acting independently of one another – identifying this as Metropolitan's “value proposition” to its members, “...acting on its members' behalf to do what they could not do alone.” The BRC concluded that Metropolitan has implemented this value proposition, supporting dramatic growth in the population and economy of Southern California. Additionally, the BRC noted that Metropolitan has adjusted its business model and operations over the past 82 years to respond to and anticipate increasing demand for water from a growing population and economy, changes in the availability of water, and regulatory constraints on withdrawals from the Delta and Colorado River to conserve and protect ecological resources, and, in the process, ensure long-term reliability of water supplies. Nevertheless, the BRC noted that change and variability over the next 50 years will substantially affect Metropolitan's ability to continue to remain a reliable provider of services to its members.

Blue Ribbon Committee Recommended 2060 Metropolitan Business Model

In the BRC Report, the BRC recommended a 2060 Metropolitan business model envisioning that Metropolitan will serve as an integrator and manager of a complex regional water system that draws on local sources of water and imported sources of water, while mitigating the risks associated with each source and maintaining financial stability. The BRC identified the following key business model elements for Metropolitan in 2060:

- Customer demand – *helping customers become wise water users*
- Diversified water portfolio and investments – *security through diversity*
- Provider of integrated water services – *a “grid” for water*
- Finances and pricing – *conserve and sustain*
- Governance and operations
- Leadership in technology and workforce development – *catalyst for innovation*

Within these business model elements, the BRC further identified 22 next steps to help Metropolitan get to the BRC 2060 business model. A summary of the BRC's recommendations is presented in Table 1, including Metropolitan's current business model, the BRC recommended 2060 Metropolitan business model, and the BRC recommended next steps needed to get to 2060, organized by the key business model elements. These BRC recommendations are reproduced from Table S.5 and Table S.6 in the Executive Summary of the BRC Report. Metropolitan staff has assigned a number to each of the 22 next steps for the purposes of the BRRC review, analysis, and recommendations.

Blue Ribbon Review Committee

In response to the findings and recommendations by the BRC, Metropolitan's Board established the BRRC in July 2011 to review the BRC next steps, and also identify and recommend appropriate follow-up actions to address the BRC next steps. The BRRC was established as a special committee to exist only until it completes its intended purpose. The BRRC met four times during 2011 on the following dates:

- Tuesday, September 27, 2011
- Tuesday, October 25, 2011
- Monday, November 7, 2011
- Monday, December 12, 2011

The BRRC review of the next steps and the recommendation on follow-up actions are presented in this report.

Blue Ribbon Review Committee Evaluation Approach of the 22 Next Steps

BRRC evaluation of the 22 next steps initially focused on determining if each next step has applicable board-adopted policy, established implementation processes, or ongoing efforts by Metropolitan. This information was provided to the BRRC by Metropolitan to assist in developing its recommendations for appropriate standing committees. Ultimately these standing committees and the Board as a whole would consider any specific actions related to the next steps that were recommended by the BRC.

Each BRC next step was evaluated by the BRRC based on information collected by Metropolitan in the following four categories:

- Applicable policies
- Implementation processes
- Standing committees that may address the next step
- Summary of current efforts

These four evaluation categories are discussed in further detail below.

Applicable Policies

The BRRC has identified board-adopted policies that provide guidance to staff in areas related to each of the next steps. Metropolitan policies are found both in law and in a variety of board-approved documents. Examples include:

- Metropolitan Water District Act
- Metropolitan Administrative Code
- Board-adopted policy principles
- Approved board letters
- Board-adopted reports, studies, and planning documents
- Board-adopted general manager business plans and financial plan
- Board-adopted capital improvement plans

Implementation Processes

Implementation processes include established processes and procedures or historical practices that have been used or are currently in use to implement related Metropolitan programs and operations, and that could be used to implement the next steps. The BRRC has identified applicable implementation processes for the next steps. Examples include:

- Integrated Water Resources Plan (IRP)
- Strategic Human Resources (HR) Plan
- Information Technology Strategic Plan
- Long Range Finance Plan
- Long-term Conservation Plan
- General Manager's Business Plan
- Capital Investment Plan
- Energy Management Plan

Standing Committee That May Address the Next Step

The mission of the BRRC is to review the next steps that were recommended by the BRC and identify appropriate follow-up actions that may be necessary. The task of following through with these actions over time will fall to Metropolitan's standing committees. The BRRC has developed an initial mapping of the BRC recommended next steps with the committee that may assess them or provide oversight for a process already in place that addresses a given next step.

Current Efforts

The BRRC has identified current efforts that Metropolitan is undertaking to address the recommended next steps. Many of these efforts were approved by prior board actions to address issues that may have been similar to those considered by the BRC.

BRRC Findings and Recommendations

A summary of the BRRC evaluation of the BRC next steps regarding applicable policies, implementation processes, and identified standing committees is included as Table 2. Detailed analyses for each of the 22 next steps are included in Appendix 1.

The BRRC developed the following general recommendations regarding the BRC next steps:

- The identified standing committees shall be responsible for assessing or implementing each of the BRC next steps.
- For those next steps that do have existing board-adopted policies, the identified standing committees shall be responsible for reviewing the effectiveness of such policies.
- For those next steps that do not have existing board-adopted policies, the identified standing committees shall consider whether development of new policies is warranted.
- The identified standing committees shall guide their assessment or implementation of each next step using the BRRC next step analyses, recommendations, and priorities contained within this report.
- The identified standing committees shall include regular updates on the next step assessment or implementation within their committee agendas.
- Staff shall prepare a report on the progress of the standing committees after two years.

Presented hereinafter are the BRRC recommendations for identified standing committees to address each of the BRC next steps, including the following:

- The BRRC findings regarding each next step
- The BRRC recommendations to the identified standing committee
- The BRRC recommended priority for assessment – within 6 months, 12 months, or 18 months

A summary of these BRRC recommendations is also presented in Table 3. With the submittal of these recommendations by the BRRC to the Board, the business of the BRRC is complete.

Next Step #1:

Evaluate selected-demand management programs in the United States and abroad to assess efficacy for testing and possible deployment

Findings of the BRRC

- Many opportunities exist for more extensive demand management within all water use sectors.
- The Long Term Conservation Plan provides an adaptive framework to achieve Metropolitan's water use efficiency goals.

Recommendations to Standing Committee

- Water Planning and Stewardship:
 - The Committee should continue its oversight on the implementation of the Long Term Conservation Plan. (*assessment within 6 months*)
 - The Committee should direct staff to develop a report on demand-management practices being implemented nationally and globally that may be feasible for Metropolitan's service area and provide any recommendations for pilot testing projects. (*assessment within 12 months*)

Next Step #2:

Develop and implement proactive communication strategies among members and the public to improve their understanding of the value of water and new actions to manage demand

Findings of the BRRC

- Metropolitan has employed a variety of communication strategies in the past.
- Educating and engaging the public in discussions about the sources and uses of water in Southern California is critical to improving the public's understanding of the value of water.

Recommendations to Standing Committee

- Communications and Legislation:
 - The Committee should continue to oversee and guide staff in the development of communication strategies. (*assessment within 6 months*)
 - The Committee should evaluate the effectiveness of various communication strategies currently in use. (*assessment within 6 months*)
 - The Committee should direct staff to incorporate evolving technologies into communication strategies. (*assessment within 12 months*)

Next Step #3:

Expand public education through investment in long-term campaigns targeting youth over the span of a generation to increase knowledge and support workforce development

Findings of the BRRC

- Metropolitan educates the full spectrum of generations from elementary school age to adults on water issues through a variety of established programs. These efforts contribute to preparing the future workforce.
- The water industry has a generational challenge of shaping public views about the value of water and motivating changes in behavior for conservation and water use efficiency.
- Metropolitan has a five-year Strategic HR Plan to provide the talent and skills needed for the future.

Recommendations to Standing Committees

- Communications and Legislation:
 - The Committee should continue to evaluate the effectiveness of Metropolitan's education programs and communication strategies in influencing lifestyle and behavioral changes, public attitudes about the value of water, and the critical value of supporting infrastructure maintenance and development. (*assessment within 12 months*)
- Organization, Personnel, and Technology:
 - The Committee should continue to oversee implementation of the Strategic HR Plan. (*assessment within 6 months*)
 - In the implementation of the Strategic HR plan, the Committee should ensure staff collaborates with other water agencies to share resources and address future workforce challenges. (*assessment within 6 months*)

Next Step #4:

Endorse Metropolitan's continued lead role in development of the Bay Delta Conservation Plan and related processes

Finding of the BRRC

- The State Water Project plays a vital role in Metropolitan's water portfolio. The Board has adopted policies over the years to provide direction to staff to ensure water supply reliability from this source in an economically and environmentally responsible manner.

Recommendation to Standing Committee

- Water Planning and Stewardship:
 - The Committee should continue its oversight on the implementation of the Bay Delta Conservation Plan and related processes. (*assessment within 6 months*)

Next Step #5:

Support California's efforts to work collaboratively with others to use its full share of water from the Colorado River at the least cost

Finding of the BRRC

- The Colorado River is one of the region's most economical sources of water supply. Therefore, Metropolitan should continue to work collaboratively with others to protect the region's investment in this resource.

Recommendation to Standing Committee

- Water Planning and Stewardship:
 - The Committee should continue its oversight on the management of supplies from the Colorado River and develop programs to maintain a full Colorado River Aqueduct during dry years when needed as a core strategy for Metropolitan to achieve long-term water supply reliability. (*assessment within 6 months*)

Next Step #6:

Evaluate the Local Resources Program (LRP) and consider its benefits and costs relative to alternative approaches for encouraging regional investments in local supplies; support the direction of the IRP in encouraging partnerships to increase local supply development

Findings of the BRRC

- Metropolitan is engaged with its member agencies in the Local Resources Development Strategy Task Force to evaluate the LRP.
- The region needs to develop new local supplies using a variety of approaches to achieve long-term water supply reliability.

Recommendation to Standing Committee

- Water Planning and Stewardship:
 - The Committee should continue to evaluate recommendations from the Local Resources Development Strategy Task Force and direct staff to implement the appropriate next steps. (*assessment within 6 months*)

Next Step #7:

Consider co-development of unsubsidized pilot projects demonstrating the viability of medium-scale local supply development

Finding of the BRRC

- Consideration of co-developing unsubsidized pilot local projects is covered under the IRP foundational actions.

Recommendation to Standing Committee

- Water Planning and Stewardship:
 - The Committee should direct staff to develop criteria and an implementation process for evaluating low-regret, low-risk actions, including feasibility studies, demonstration and pilot projects. (*assessment within 12 months*)

Next Step #8:

Accelerate assessments of costs and benefits of expanding small, distributed surface storage and expanded groundwater storage in the region

Finding of the BRRC

- The BRRC affirms the benefits of distributed in-region storage. The current Replenishment Workgroup is assessing the regional benefits of surface and groundwater storage and developing a new approach for Metropolitan's Replenishment Program.

Recommendation to Standing Committee

- Water Planning and Stewardship:
 - The Committee should continue to evaluate recommendations from the Replenishment Workgroup and direct staff to implement the appropriate next steps. (*assessment within 6 months*)

Next Step #9:**Invest in new out-of-basin agricultural water sources and water from conservation investments***Findings of the BRRC*

- The BRRC affirms the benefits of agreements with out-of-basin agricultural entities to provide supplies to the region in a manner that benefits agricultural communities and addresses environmental needs.
- The BRRC recognizes the benefits of these programs in providing innovative and flexible operations.

Recommendation to Standing Committee

- Water Planning and Stewardship:
 - The Committee should continue to evaluate opportunities that are economically and environmentally responsible. (*assessment within 12 months*)

Next Step #10:**Develop strategy for exploiting Metropolitan's energy resources in the form of partnerships and funding opportunities for energy efficiency, energy reliability, and greenhouse-gas emission reductions***Finding of the BRRC*

- The Board has adopted policies on Energy Management (2010) and management of real property assets (2011). These policies guide staff in implementing projects and programs related to Metropolitan's owned and operated facilities and property leasing efforts to third parties for energy development.

Recommendations to Standing Committees

- Engineering and Operations:
 - The Committee should continue to oversee the implementation of the Energy Management Policy to ensure benefits from cost-effective and sustainable energy projects and programs. (*assessment within 6 months*)
- Real Property and Asset Management
 - The Committee should continue to oversee the property leasing program to maximize benefits to Metropolitan's core mission. (*assessment within 6 months*)

Next Step #11:**Identify potential major elements of a more regionally connected system – including a review of previous studies of groundwater storage-system potential – and identify gaps in regional conveyance and storage capacity***Findings of the BRRC*

- The BRRC supports Metropolitan's current practice of evaluating and adding regional connectivity in conjunction with facility improvements that are either driven by demand or regulatory needs.
- The BRRC agrees with the Blue Ribbon Committee that Metropolitan's investments in its water system have to be well-matched to the distribution of water supplies and demands, and account for water quality concerns.

Recommendations to Standing Committees

- Engineering and Operations:

- The Committee should determine whether Metropolitan should take further steps to evaluate the potential of enhancing regional connectivity of its water distribution system when facility improvements are being studied. (*assessment within 18 months*)
- Water Planning and Stewardship:
 - The Committee should determine whether Metropolitan should take further steps to evaluate the potential of enhancing regional connectivity of its water distribution system when evaluating different portfolios of local and imported water supplies. (*assessment within 18 months*)

Next Step #12:**Expand planning partners to include wastewater, flood control, and other agencies***Finding of the BRRC*

- The BRRC recognizes the value of collaborative planning with other agencies to improve regional water supply reliability.

Recommendation to Standing Committee

- Water Planning and Stewardship:
 - The Committee should determine whether there is a need to develop an explicit policy to guide staff in expanding collaborative planning efforts. (*assessment within 12 months*)

Next Step #13:**Build capabilities to analyze the economics of integrated water resource planning and management for the region***Finding of the BRRC*

- The BRRC recognizes that the complexity of water resources planning will increase over time. Therefore, Metropolitan should increase its capacities to understand and analyze economic factors affecting water supplies and demands.

Recommendations to Standing Committees

- Finance and Insurance:
 - The Committee should continue to ensure adequate economic analysis is performed for implementing the IRP. (*assessment within 18 months*)
- Water Planning and Stewardship:
 - The Committee should continue to ensure adequate economic analysis is performed for implementing the IRP. (*assessment within 18 months*)

Next Step #14:**Evaluate the potential benefits, costs, and constraints for water trading among members, including the implementation of several pilot projects***Findings of the BRRC*

- Existing adopted policies do not permit trading of Metropolitan's water supplies.
- The topic of member agencies establishing Tier 1 water supply limits and ability to trade those limits is being discussed under the ongoing Rate Refinement Process.

Recommendation to Standing Committee

- Finance and Insurance:
 - The Committee should continue to oversee the Rate Refinement Process and evaluate any recommendations on trading of Tier 1 access among member agencies. (*assessment within 12 months*)

Next Step #15:**Develop an adaptive long-range financial plan as a complement to the IRP***Findings of the BRRC*

- The Long Range Finance Plan (LRFP) reflects the water resource strategy in Metropolitan's IRP.
- The LRFP is being updated and is scheduled to be completed for Board consideration following the completion of the Rate Refinement Process.

Recommendation to Standing Committee

- Finance and Insurance:
 - The Committee should continue to oversee the development of the Long Range Finance Plan. (*assessment within 18 months*)

Next Step #16:**Initiate a process to review the current pricing structure in comparison to potential alternatives, evaluating the sustainability of the various options under a range of scenarios***Findings of the BRRC*

- Metropolitan is engaged with its member agencies in a Rate Refinement Process to review its pricing structure.
- One of the elements of financial sustainability is an appropriate balance between fixed and variable revenues.

Recommendation to Standing Committee

- Finance and Insurance:
 - The Committee should continue to oversee the Rate Refinement Process and the balance between fixed and variable revenues. (*assessment within 12 months*)

Next Step #17:**Review all major cost components and apply value-engineering principles to the process of identifying opportunities for cost savings***Findings of the BRRC*

- Metropolitan has a value-engineering process in place and reviews all major cost components during its budgeting process.
- The BRRC agrees that Metropolitan should engage in a continuous exercise to improve business processes and look for opportunities for efficiency and productivity gains through technology and operational innovations.

Recommendations to Standing Committees

- Engineering and Operations:
 - The Committee should continue to oversee and ensure a vigorous application of value-engineering principles. (*assessment within 6 months*)
 - The Committee should receive periodic staff updates on assessments of operations to ensure compliance and reduce costs. (*assessment within 6 months*)
- Finance and Insurance:
 - The Committee should continue to oversee the Budget Process and Capital Investment Plan. (*assessment within 6 months*)

Next Step #18:**Initiate an external review of governance structure***Finding of the BRRC*

- The Board historically reviews its own governance as needed.

Recommendation to Standing Committee

- Executive:
 - The Committee should determine whether there is a need to review Metropolitan's governance structure, including the composition of the Board, by-laws and other elements identified by the Board as essential to its functioning. If the need for a review is determined, the Committee should decide on the external reviewer, scope, process, and timeframe of the effort. (*assessment within 18 months*)

Next Step #19:**Begin a process to consider changes to the existing vision and mission statements***Findings of the BRRC*

- Historically, the Board reviews the mission statement in conjunction with IRP updates every five years. The BRRC finds that this is the appropriate interval for review.
- Metropolitan has no formal vision statement.

Recommendation to Standing Committee

- Executive:
 - The Committee should determine whether there is a need to review Metropolitan's mission statement at this time. (*assessment within 6 months*)
 - The Committee should decide whether to develop a formal vision statement. (*assessment within 6 months*)

Next Step #20:**Brand Metropolitan as a global leader on efficient and innovative water management and technologies***Findings of the BRRC*

- Metropolitan has been recognized as a leader in efficient and innovative water management and technologies.
- Metropolitan's current outreach and education efforts contribute to advancing efficient and innovation water management and technologies.

Recommendation to Standing Committee

- Communications and Legislation:
 - The Committee should continue to oversee Metropolitan's outreach and education efforts. (*assessment within 6 months*)

Next Step #21:

Consider different types of opportunities for taking a lead role in fostering a water service and technology innovative region

Findings of the BRRC

- Metropolitan has taken leadership roles in many technical areas to manage water supplies and demands, and meet regulatory requirements.
- The BRRC recognizes the need for innovative approaches and technology to meet the region's water supply needs in an economically and environmentally responsible manner.

Recommendations to Standing Committees

- Engineering and Operations:
 - The Committee should continue to ensure staff considers innovative approaches and collaborates with others to develop new technologies for infrastructure construction, monitoring, repair, and rehabilitation, water quality treatment, compliance with drinking water regulations, and energy management. (*assessment within 12 months*)
- Organization, Personnel, and Technology
 - The Committee should continue to oversee the use of information technology to manage Metropolitan's business and operations. (*assessment within 6 months*)
 - The Committee should continue to evaluate information technology advances and their application to Metropolitan. (*assessment within 6 months*)
- Water Planning and Stewardship
 - The Committee should continue to ensure staff considers innovative approaches and collaborates with others to develop new technologies to promote water use efficiency and integrated water resources planning. (*assessment within 6 months*)

Next Step #22:

Begin a strategic planning process to assess needs and actions to shape a workforce that meets the needs of the new business model, including new training and development programs to increase qualified personnel to meet workforce needs and reflect the region's diversity

Finding of the BRRC

- Metropolitan has a five-year Strategic HR Plan to provide the talent and skills for the future.

Recommendation to Standing Committee

- Organization, Personnel, and Technology:
 - The Committee should continue to oversee the implementation of the Strategic HR Plan and talent management strategy. (*assessment within 6 months*)

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Appendix 1
Analysis of BRC Next Steps

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Next Step #1 – Demand Management

Business Model Element: Customer Demand
Next Step: Evaluate selected-demand management programs in the United States and abroad to assess efficacy for testing and possible deployment
Standing Committee: Water Planning and Stewardship

Applicable Policy: X Yes No

By Minute Item 48772, dated August 16, 2011, the Board adopted the Long-term Conservation Plan (LTCP) and revisions to the Water Conservation Policy Principles. The LTCP calls for the use of multiple strategies to reduce per capita water use and achieve the IRP water use efficiency targets. This includes implementing new programs that will be catalysts to change market demand. The Policy Principles include providing leadership in advancing new or untapped water conservation practices and encouraging research and development of promising activities.

By Minute Item 48449, dated October 12, 2010, the Board adopted Metropolitan's Integrated Water Resources Plan (IRP), which establishes Metropolitan's role of coordinating closely with its member agencies to achieve water use efficiency targets both at a retail agency level in compliance with legislative requirements, and as a region with a 20 percent reduction in per capita water use by 2020.

Implementation Process: X Yes No

Metropolitan is pursuing new approaches to demand management through implementation of the LTCP. The LTCP seeks to achieve water savings through market transformation using programs that are catalysts for change, such as outreach and education, incentives, or industry standards. Metropolitan and the member agencies are introduced to new program ideas through involvement in state and national water use efficiency organizations. New demand management concepts and pilot programs are evaluated in Metropolitan's annual program review and refinement process conducted with the Board and member agencies.

Current efforts:

Metropolitan's efforts to implement the LTCP through cost-effective programs include:

- Offering both a traditional program and strategic focus program to change consumer preferences for water efficient technologies and services through outreach and education, incentives, strategic alliances, and codes and standards
- Networking with water agencies in other regions of California and the United States to identify alternative program concepts and strategies
 - Participating in WaterSmart Innovations 2011, a national conference with presentations on local, regional, national and international water use efficiency programs
 - Initiating a dialogue with water agency representatives from Florida, Georgia, Texas, Colorado, Nevada, and Arizona
 - Participating in the California Urban Water Conservation Council
 - Chair of Research and Evaluation and Commercial and Industrial Committees

Next Step #1 – Demand Management

- Member of Residential and Landscape Committees
- Participating in the California Urban Water Agencies Water Use Efficiency Committee
- Reviewing Australian water conservation programs and demand modeling
- Investigating energy efficiency programs as potential models for water efficiency programs
- Conducting an annual review of water use efficiency programs with member agencies and evaluating program alternatives

Next Step #2 – Communication Strategies

Business Model Element: Customer Demand
Next Step: Develop and implement proactive communication strategies among members and the public to improve their understanding of the value of water and new actions to manage demand
Standing Committee: Communications and Legislation

Applicable Policy: X Yes No

The Metropolitan Water District Act, Section 126 [Dissemination of Information], authorizes Metropolitan to disseminate information concerning the activities of the district. Section 130.5 [Legislative Findings and Declarations Relating to Conservation] requires Metropolitan to place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures, and report to the legislature by February 1 of each year on its progress in achieving increased emphasis.

By Minute Item 48772, dated August 16, 2011, the Board adopted the Long-term Conservation Plan (LTCP) and revisions to the Water Conservation Policy Principles. The LTCP calls for the use of multiple strategies to reduce per capita water use and change the public's perception of the value of water, including outreach and education.

Implementation Process: X Yes No

The General Manager's FY 2011/12 Business Plan identifies communications as a core business activity. Metropolitan provides internal and external communications about Metropolitan's operations, policies and programs through multiple efforts. Metropolitan meets regularly with member agency managers and member agency Public Information Officers to coordinate on external communications.

Current efforts:

Metropolitan's communication strategies are implemented to ensure coordination and delivery of water policy messages; provide public education and outreach; and manage public information programs. Key efforts include:

- Providing clear, consistent communications through multi-media efforts, such as www.mwdh2o.com, www.bewaterwise.com, press releases, e-newsletters, and videos
- Providing timely and accurate information to the media about water-related subjects as well as Metropolitan's programs, projects and issues by working with reporters and editors from newspapers, Internet news sites, magazines, radio and television, trade and specialty publications, social networking (e.g., Facebook and conservation videos on YouTube) and Internet-based (Web site) outreach and marketing
- Collaborating with water agencies beyond Metropolitan's service area on a campaign to communicate the value of water (e.g., Association of California Water Agencies and American WaterWorks Association education campaigns)
- Adapting the water conservation campaign to focus on free or earned media alternatives, enhancing Metropolitan's social media tools, social media educational outreach efforts and the

Next Step #2 – Communication Strategies

development of regional messaging based on information gained through focus groups and collaboration with member agencies

- Working with member agency Public Information Officers and Conservation Coordinators to develop regionally consistent messages that can be tailored for member agency service areas
- Providing briefings for business and legislative community leaders

Next Step #3 – Public Education

Business Model Element: Customer Demand
Next Step: Expand public education through investment in long-term campaigns targeting youth over the span of a generation to increase knowledge and support workforce development
Standing Committees: Communications and Legislation Organization, Personnel, and Technology

Applicable Policy: X Yes No

The Metropolitan Water District Act, Section 130.5 [Legislative Findings and Declarations Relating to Conservation], requires Metropolitan to place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures, and report to the legislature by February 1 of each year on its progress in achieving increased emphasis. Public information and school education programs are recognized as a best management practice for water conservation.

Implementation Process: X Yes No

The General Manager's FY 2011/12 Business Plan identifies communications and human resources excellence as core business activities. Metropolitan meets regularly with member agency managers and member agency Public Information Officers to coordinate on outreach and education programs. In addition, Metropolitan is implementing the five-year Strategic Human Resources (HR) Plan to provide the right talent and skills for the future.

Current efforts:

Metropolitan's efforts to address generational challenges and support development of the future workforce include:

- Annual outreach events targeting youth and young adults: e.g. Solar Cup (high school), World Water Forum (college)
- In-school education programs targeting elementary through high school students
- New conservation curriculum targeting middle school through high school students
- Outreach targeting pre-professionals and professionals through schools, job fairs
- Providing practical work experience to train, educate and prepare pre-professionals for careers in the water industry through Metropolitan's Internship Program
- Providing State-certified entry to journey-level skills training in technical, vocational and trades occupations through Metropolitan's Pre-Apprenticeship/Apprenticeship Programs administered by Water System Operations Technical Training
- Coordinating with Workforce Investment Bureaus to encourage job and workforce development

Next Step #3 – Public Education

- Encouraging development of educational and vocational programs through:
 - Engineering Cooperative Education Program in cooperation with the Cal Poly Pomona Foundation
 - College of the Canyons Water Technology Advisory Council
 - California State University – Fresno advisory panel
 - Los Angeles Harbor College Workforce and Green Communities Advisory Council
 - Santiago Canyon College Water Utility Science Program advisory board and Apprenticeship Program Local Education Agency affiliate (Metropolitan's accredited curriculum underwriter/approver)
 - Riverside County Department of Education Vocational Technical Education Advisory Council
 - Career and Technical Education Center at the Pomona Fairplex
- Collaborating with American WaterWorks Association and other water agencies on workforce development strategies
- Integrating advancements in information technology within Metropolitan's operations to meet industry standards and expectations of the future workforce
 - Leveraging the impact of new learning technologies, social media and mobile communications on youth as well as on influencing stakeholder support

Next Step #4 – Bay Delta

Business Model Element: Diversified Water Portfolio and Investments
Next Step: Endorse Metropolitan's continued lead role in development of the Bay Delta Conservation Plan and related processes
Standing Committee: Water Planning and Stewardship

Applicable Policy: Yes No

The Board has a long history of directing staff to take a supporting role in the Bay Delta Conservation Plan (BDCP) and related processes:

- By Minute Item 45753, dated May 11, 2004, the Board adopted the refined Bay-Delta finance and cost allocation policy principles for communication with the California Bay-Delta Authority and interested parties
- By Minute Item 46637, dated April 11, 2006, the Board adopted the policy principles regarding long-term actions for the Sacramento-San Joaquin River Delta
- By Minute Item 47135, dated June 12, 2007, the Board supported, in principle, the proposed Delta Action Plan
- By Minute Item 48449, dated October 12, 2010, the Board adopted Metropolitan's Integrated Water Resources Plan (IRP), which identifies improving supplies from the Bay Delta as a core strategy for Metropolitan to achieve long-term supply reliability.

Implementation Process: Yes No

Bay-Delta related processes can be divided into three categories:

- Emergency Response – coordinated effort among the Department of Water Resources (DWR), U.S. Army Corps of Engineers, and Metropolitan to reduce the threat of levee failures and corresponding water supply outages due to earthquakes
- Near-term – coordinated effort lead by DWR and the State and Federal Contractors Water Agency to develop near-term ecosystem restoration projects
- Long-term – collaboration of state and federal resource agencies, public water agencies, and environmental interest groups to enhance ecosystem restoration and water supply conveyance in the Delta through development of the BDCP

Next Step #4 – Bay Delta**Current efforts:**

The BDCP is being prepared by a group of water agencies, environmental and conservation organizations, state and federal agencies, and other interest groups. The schedule to complete the final Environmental Impact Report/Statement is the end of 2012 and the Record of Decision by February 2013. Construction of conveyance improvements is scheduled to start in 2016 and be operational by 2023.

The State and Federal Contractors Water Agency, Santa Clara Valley Water District, Westlands Water District, and Metropolitan are participating in funding the restoration of the Tule Red property in the Suisun Marsh. Work is also proceeding on developing environmental documentation and preliminary designs to proceed with habitat restoration at the Yolo Ranch property in the Yolo Bypass area.

Metropolitan is conducting a forecast of turbidity and adult smelt distribution and movement on a regular basis from December through February to allow for better understanding of how water projects can be operated to avoid adult entrainment and protection of newly spawned fish.

Metropolitan supported hydrodynamic modeling studies and worked with state/federal agencies toward a cost-sharing agreement on Bacon Island levee improvements to support the fresh water pathway project with the goal of allowing timely resumption of water operations following a major earthquake and widespread levee failures in the Delta.

Metropolitan supported Delta smelt lifecycle and entrainment models, and scientific work on nutrient/food chain/fishery linkages.

Next Step #5 – Colorado River

Business Model Element: Diversified Water Portfolio and Investments
Next Step: Support California's efforts to work collaboratively with others to use its full share of water from the Colorado River at the least cost
Standing Committee: Water Planning and Stewardship

Applicable Policy Implications: Yes No

The Board has been actively involved in ensuring the reliability of Metropolitan's Colorado River supplies:

- By Minute Item 45517, dated September 23, 2003, the Board authorized execution of the Quantification Settlement Agreement (QSA) and related agreements pertaining to California's Colorado River Water Use Plan. The QSA facilitates other agreements and actions that will maintain certainty and reliability of Colorado River water supplies and provides a strong basis for Metropolitan to develop water management programs and transfers and exchange programs.
- By Minute Item 48449, dated October 12, 2010, the Board adopted Metropolitan's Integrated Water Resources Plan (IRP), which identifies managing supplies from the Colorado River and developing programs to maintain a full Colorado River Aqueduct during dry years as a core strategy for Metropolitan to achieve long-term supply reliability.
- By Minute Item 46191, dated April 12, 2005, the Board adopted Metropolitan's Policy Principle on Drinking Water Quality which supports efforts to adopt cost-effective drinking water regulations to help ensure the protection of human health, and maintain or improve water quality aesthetics.
- By Minute Item 42820, dated February 10, 1998, the Board amended Metropolitan's Policy Principles on Source Water Protection to further address the clean-up of contaminated drinking water supplies stemming from the Colorado River.

Implementation Process: Yes No

Metropolitan develops water management programs for the Colorado River Aqueduct (CRA) through implementation of the Core Resources Strategy of the IRP.

Metropolitan secures its annual diversion amount through the Bureau of Reclamation (Reclamation) 417 Diversion Consultation Process. Metropolitan also works with Reclamation to develop an annual operation plan to obtain and manage available surplus water. Additionally, Metropolitan works closely with Colorado River basin states and with other California Colorado River interests.

Current efforts:

Metropolitan is collaborating with other basin state interests to maximize Colorado River water supplies at the least cost.

- Metropolitan, with basin states and Reclamation, is conducting a Colorado River Basin Study on long-term supply availability. A report is scheduled for release in July 2012.

Next Step #5 – Colorado River

- Metropolitan is participating with the Colorado River Board, Colorado River Water Management Workgroup, Colorado River Basin Salinity Control Forum, and the other Basin states in cooperative interstate efforts to control the salinity of Colorado River water.
- Metropolitan continues to coordinate with other Colorado River stakeholders, including participation with the Lower Colorado River Water Quality Partnership and the Lake Mead Water Quality Forum, to address critical water quality issues that threaten the River and engage in remediation and protection efforts.
- Metropolitan is seeking renewal of Hoover Power through federal legislation as well as engaging with the Western Area Power Administration to determine the remarketing of Hoover Power after 2017. Generally 55 to 70 percent of the power requirements for pumping the CRA at full capacity (1.25 million acre feet of Colorado River water) are secured through long-term contracts with the United States for energy generated from facilities located on the Colorado River (Hoover Power Plant and Parker Power Plant) and Edison. These contracts provide Metropolitan with reliable and economical power resources to pump Colorado River water to Metropolitan's service area until 2017, when only the Parker Power Plant contract will remain in effect.
- Metropolitan continues to work with Reclamation to manage the Lower Colorado River Multi-species Habitat Conservation Plan, which is a 50-year habitat conservation plan to address Endangered Species Act compliance and protect nearly 100 federal and state listed and sensitive species in the region covering the lower Colorado River from Lake Mead to the border with Mexico. This Conservation Plan protects both the wildlife in the area and the federal projects' ability to operate with minimum restrictions.
- Metropolitan participates in water augmentation programs such as climate modification and tamarisk control.

Metropolitan has developed a number of water management programs to fill its CRA as needed in dry years. These programs include:

- Imperial Irrigation District (IID) Conservation Agreement: Under a 1988 agreement, Metropolitan provided funding for IID to construct and operate a number of conservation projects. This agreement yields 85,000 to 105,000 AFY for Metropolitan.
- Palo Verde Irrigation District (PVID) Land Management, Crop Rotation and Water Supply Program: In 2004, Metropolitan entered into a 35-year agreement with PVID to provide up to 133,000 acre-feet of water to Metropolitan in certain years.
- Intentionally-Created Surplus Program: In 2007, Reclamation adopted new guidelines for the operation of Colorado River reservoirs, and the Intentionally Created Surplus program to encourage water conservation activities by allowing agencies to store conserved water in Lake Mead. Metropolitan can store up to 1.5 MAF under this program in Lake Mead. The Secretary of the Interior delivers intentionally-created surplus water to Metropolitan in accordance with the terms of a December 13, 2007 Delivery Agreement between the United States and Metropolitan.
- Metropolitan/Coachella Valley Water District (CVWD) and Desert Water Agency (DWA) Exchange and Advance Delivery Agreements: Metropolitan has agreements with CVWD and DWA that allow Metropolitan to exchange its Colorado River water for those agencies' State Water Project entitlement water on an annual basis. Because CVWD and DWA do not have a physical connection to the State Water Project, Metropolitan takes delivery of their State Water Project supplies and delivers a like amount of Colorado River water to the agencies. The agreements allow Metropolitan to deliver Colorado River water in advance to these agencies for storage in the Upper Coachella Valley groundwater basin. Metropolitan has the option to augment

Next Step #5 – Colorado River

available supplies and meet the exchange delivery obligation through drawdowns of the State Water Project advance delivery account, rather than directly delivering Colorado River water.

- Metropolitan has also entered into agreements for interstate exchanges that would augment CRA supplies.

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Next Step #6 – Evaluate LRP

Business Model Element: Diversified Water Portfolio and Investments
Next Step: Evaluate the Local Resources Program (LRP) and consider its benefits and costs relative to alternative approaches for encouraging regional investments in local supplies; support the direction of the IRP in encouraging partnerships to increase local supply development
Standing Committee: Water Planning and Stewardship

Applicable Policy: X Yes No

Since 1982, Metropolitan has assisted local agencies in the development of water recycling, groundwater recovery, and other local resources. Over the past three decades, the Board has adopted several policies to support the development of local resources. More recent policies include:

- By Minute Item 43021, dated June 9, 1998, the Board adopted the Local Resources Program (LRP) as the successor to the Local Projects Program
- By Minute Item 44356, dated February 13, 2001, the Board updated the Policy Principles on Brackish and Seawater Desalination
- By Minute Item 44578, dated August 20, 2001, the Board approved the Seawater Desalination Program and administrative guidelines
- By Minute Item 45115, dated December 10, 2002, the Board authorized finalizing contract terms and principles for Seawater Desalination Program agreements
- By Minute Item 46491, date December 13, 2005, the Board approved Metropolitan's role of regional facilitator to address seawater desalination and other local projects
- By Minute Item 47049, dated April 10, 2007, the Board adopted the Local Resources Program provisions including a goal of 174,000 acre-feet per year of new production

With these policies, the Board has authorized agreements for 85 local projects to produce recycled water and recover groundwater. The Board has also authorized three agreements to provide incentives for pilot test seawater desalination programs.

By Minute Item 48449, dated October 12, 2010, the Board adopted Metropolitan's Integrated Water Resources Plan (IRP). The IRP establishes three areas in which local resources play a key role. First, the Core Resources Strategy calls for the development of 102 TAF of additional local resources. Second, water recycling helps meet the regional goal of reducing per capita water use by 20 percent by 2020. Third, components of local supply projects may have value as foundational actions that prepare the region for additional development in the future.

Implementation Process: X Yes No

In April 2011, staff began working with member and retail agencies to conduct a review of Metropolitan's LRP through the Local Resources Development Strategy Task Force (Task Force). The goals of the Task Force are to:

- Identify program improvements and alternative mechanisms to support development of local resources consistent with the goals in the IRP

Next Step #6 – Evaluate LRP

- Investigate approaches that are most cost-effective and sustainable based on the net financial impact on Metropolitan and its rates

Current efforts:

The Task Force is meeting regularly to review financial and non-financial strategies, identify program improvements, and examine alternative mechanisms to support development of local resources consistent with the IRP. The Task Force reported to the Board on its efforts in August 2011 and plans to provide the Board with recommendations for consideration later in fiscal year 2011/12.

Next Step #7 – Local Supply Pilot Projects

Business Model Element: Diversified Water Portfolio and Investments
Next Step: Consider co-development of unsubsidized pilot projects demonstrating the viability of medium-scale local supply development
Standing Committee: Water Planning and Stewardship

Applicable Policy: X Yes _____ No

By Minute Item 48449, dated October 12, 2010, the Board adopted Metropolitan's Integrated Water Resources Plan (IRP), which includes foundational actions to further develop or study local resources. The foundational actions are low-regret, low-risk actions, including feasibility studies, demonstration and pilot projects, legislative efforts and research, undertaken with the aim to reduce the time it takes for a project to reach full production.

Implementation Process: X Yes _____ No

Currently, member agencies propose projects, which are then evaluated on a case-by-case basis using a business case approach. Proposals determined to be potentially cost effective and have regional benefits are brought to member agency managers and the Board for consideration or further investigation.

Current efforts:

Metropolitan recently collaborated with LADWP on the Tujunga well field groundwater treatment project. Other projects currently under reconnaissance evaluation include:

- Los Angeles County Sanitation Districts Joint Water Purification Study
- West Basin MWD ocean water desalination program master plan

Staff is developing criteria and a process to systematically evaluate proposals for pilot projects.

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Next Step #8 – Distributed Surface Storage and Groundwater Storage

Business Model Element: Diversified Water Portfolio and Investments
Next Step: Accelerate assessments of costs and benefits of expanding small, distributed surface storage and expanded groundwater storage in the region
Standing Committees: Water Planning and Stewardship

Applicable Policy: Yes No

The Metropolitan Water District Administrative Code Division IV defines Metropolitan's Water Service Policies. Sections 4107 through 4118 define water available for groundwater and surface storage in the region. Section 4514 defines Replenishment Service for groundwater and surface storage, and Section 4517 defines the Cooperative Storage Program.

By Minute Item 43514, dated April 13, 1999, the Board adopted the Water Surplus and Drought Management (WSDM) Plan. Replenishment Service, when available, is administered in accordance with Metropolitan's WSDM Plan.

By Minute Item 43860, dated January 11, 2000, the Board approved strategies and principles for implementing groundwater storage programs.

By Minute Item 48449, dated October 12, 2010, the Board adopted Metropolitan's Integrated Water Resources Plan (IRP) that includes an evaluation of regional storage needs. As a result of past IRP's, Metropolitan has implemented conjunctive use programs at certain groundwater basins through agreements with member agencies, groundwater management entities, and local water producers.

Implementation Process: Yes No

Metropolitan has been delivering discounted water to replenish local storage since the 1950's, through a variety of programs developed over the years, including the Interruptible Program, Seasonal Storage Service and the current Replenishment Service Program. The current Replenishment Service Program, described in Administrative Code Section 4514, incentivizes agencies to increase purchase and delivery of imported water into local storage during periods of favorable supply. Replenishment Service water may be used to increase local storage, increase the operating yield of a groundwater basin above the safe yield operation, or refill a previous year's groundwater basin overdraft.

The Conjunctive Use Program (CUP) was created to develop in-region groundwater storage for dry-year use. Metropolitan's IRP targets the development of in-region groundwater storage for dry-year supplies that could improve regional reliability. In 2000, Metropolitan pursued an agreement with the California Department of Water Resources to administer \$45 million of Proposition 13 funds for the development of groundwater storage programs in Metropolitan's service area. Based on the IRP policy and available Proposition 13 funding, Metropolitan and the member agencies developed nine active groundwater storage programs. These programs provide approximately 212,000 acre-feet (AF) of contracted storage space and ability for Metropolitan to call 70,000 AF of annual yield.

Next Step #8 – Distributed Surface Storage and Groundwater Storage**Current efforts:**

Metropolitan and its member agencies kicked off a Replenishment Workgroup process in March 2011 to develop a new approach for replenishment of local storage with imported supplies in the future.

Currently, the workgroup has completed a series of basin presentations for technical assessment and developed a set of principles to guide program development. The set of principles was presented to the Board for input in October 2011.

Based on Board input and further member agency discussion, proposed policy principles to revise the Replenishment Service Program will be presented for Board consideration in November 2011. This will be followed by options and recommendations for a revised program, based on the policy principles approved in November, for board consideration in December 2011.

Each of the current nine conjunctive use program agreements has been in place for at least five years. Many of the programs have been operated through one full cycle of storage and extraction. An operating committee is established for each program to develop an annual operating plan and review costs and performance. Staff continues to work with the operating committees to improve the conjunctive management of imported supplies and groundwater resources.

Next Step #9 – Agricultural Water Sources

Business Model Element: Diversified Water Portfolio and Investments
Next Step: Invest in new out-of-basin agricultural water sources and water from conservation investments
Standing Committee: Water Planning and Stewardship

Applicable Policy: X Yes No

Metropolitan has several policies that address out-of-basin agricultural water sources:

- The Metropolitan Water District Administrative Code Section 4203 Water Transfer Policy states that Metropolitan will vigorously pursue the development of water transfers to meet its public water supply objectives in the future, subject to certain considerations including developing water transfers in cooperation with the agricultural community.
- By Minute Item 45724, dated May 11, 2004, the Board authorized revisions to the contractual principles in the agreements related to the 35-year Palo Verde Irrigation District Land Management, Crop Rotation, and Water Supply Program.
- By Minute Item 47012, dated March 13, 2007, the Board authorized amendments to Metropolitan's conservation agreement with the Imperial Irrigation District (IID) and the related approval agreement with IID, Coachella Valley Water District and Palo Verde Irrigation District.
- By Minute Item 48449, dated October 12, 2010, the Board adopted Metropolitan's Integrated Water Resources Plan (IRP), which identifies the pursuit of new sustainable storage and transfer agreements for the State Water Project and Colorado River-related storage, conservation, transfers, exchanges, and agreements as core strategies for Metropolitan to achieve long-term supply reliability.
- By Minute Item 48764, dated August 16, 2011, the Board authorized an amendment to the agreement with the California Department of Water Resources to streamline future purchases of water transfer supplies from Yuba County Water Agency.

Implementation Process: X Yes No

Metropolitan pursues out-of-basin agricultural water sources and water from conservation investments as part of implementing the IRP's Core Resources Strategy. Metropolitan currently manages approximately 400 agreements to ensure water supply reliability for the region. These agreements are for programs ranging from imported water supplies on the Colorado River and State Water Project to conservation agreements and local supply development contracts within the region. The process to develop new programs is implemented in coordination with these agreements and Metropolitan's long-standing relationships with out-of-basin water rights holders.

Current efforts:

Metropolitan is pursuing the following projects to develop out-of-basin agricultural water resources:

- Negotiate and implement a demonstration land fallowing project with Bard Water District near Yuma

Next Step #9 – Agricultural Water Sources

- Resolve the Yuma Island dispute, an area next to the Colorado River that contains about 2,500 acres of land that have disputed water right claims associated with them. This area of Arizona land within California has been irrigated since the construction of Hoover Dam.
- Negotiate an agreement with Mexico to develop an agricultural conservation program
- Explore new water management agreements with other State Water Contractors
- Continue to maintain and develop agreements with agricultural interests on the Colorado River and in the Central Valley.

Next Step #10 – Energy Resources

Business Model Element: Diversified Water Portfolio and Investments	
Next Step: Develop strategy for exploiting Metropolitan's energy resources in the form of partnerships and funding opportunities for energy efficiency, energy reliability, and greenhouse-gas emission reductions	
Standing Committees: Engineering and Operations Real Property and Asset Management	

Applicable Policy: X Yes No

By Minute Item 44813, dated March 12, 2002, the Board adopted the policy principles regarding global climate change and water resources stating that Metropolitan supports further research into the potential water resource and quality effects of global climate change, and supports flexible "no-regret" solutions that provide water supply and quality benefits while increasing the ability to manage future climate change impacts. In addition, Metropolitan supports reasonable, economically viable, and technologically feasible management strategies and efforts for reducing the potential impacts of global climate change to water resources.

By Minute Item 47598, dated August 19, 2008, the Board adopted the Energy Policy Principles to provide guidance and direction for Metropolitan's activities in the current energy market and in future industry, regulatory and legislative initiatives. The policy is composed of 12 principles that are grouped in four categories: reliability, economics, compliance/regulatory, and stewardship.

By Minute Item 48371, dated August 17, 2010, the Board adopted the Energy Management Policies to: (1) contain costs and reduce Metropolitan's exposure to energy price volatility; (2) increase operational reliability by implementing renewable energy projects; (3) provide a revenue stream to offset energy costs; and (4) move Metropolitan toward energy independence, including maximizing power production facilities and energy contracts for direct use by Metropolitan. These policies are consistent with Metropolitan's goal to balance long-term reliability with cost control, with the added benefit of reducing greenhouse gas (GHG) emissions.

By Minute Item 48766, dated August 16, 2011, the Board adopted the policy principles for managing Metropolitan's real property assets and changes to the Administrative Code. The primary purpose of these policy principles is to achieve fair market value for Metropolitan's real property assets, and only accept less than fair market value when there is a direct benefit to Metropolitan's core mission. These policies provide guidance and direction not only to Metropolitan staff, but to those seeking varied types of property rights through leases, easements, entry permits, and other transactions that convey property interests to others.

Next Step #10 – Energy Resources**Implementation Process:** Yes No

The General Manager's FY 2011/12 Business Plan identifies the effective management of power system requirements and optimization of power generation as a major objective. As part of the Business Plan, staff continues to manage CRA power costs, reduce exposure to energy price volatility, and work with the Department of Water Resources (DWR) and the State Water Contractors (SWC) to minimize power costs on the State Water Project (SWP). Staff also manages non-CRA energy costs and increases power sales revenue by: (1) obtaining the most favorable electric service rate available at Metropolitan's facilities, and (2) achieving the maximum renewable value for the energy sold from Metropolitan's small hydroelectric plants as existing contracts are renewed or replaced. Additionally, staff reviews and recommends actions to minimize the power costs of the SWP through involvement with DWR.

Additional implementation processes include:

- Reporting to the Board on Metropolitan's Energy Management Plan
- Reporting to the Board on implementation and impacts of AB 32, the California Global Warming Solutions Act of 2006 and related issues such as cap-and-trade
- Board approval for CIP and individual projects
- Developing, completing, and managing leases through revenue generation, property management, and right-of-way
- Implementing energy management and development through two approaches:
 - Energy management improvements that are directly related to Metropolitan's facilities and operations
 - Leasing Metropolitan's land to others for energy development
- Incorporating the findings of the Energy Management and Reliability Study – Report No. 1352 December 2009

Current efforts:

Metropolitan's current efforts in energy management include projects and programs related to its owned and operated facilities and property leasing efforts to third parties for energy development.

Metropolitan Owned and Operated Facilities*Solar*

- 1.0 MW solar project operating at Skinner Treatment Plant – April 2009
- 1.8 MW solar project planned for Weymouth Treatment Plant
- 520 kW solar project operating at Diamond Valley Lake (DVL) Visitor's Center
- Estimated potential for solar generation at all treatment plants and other retail energy-served properties
- Implementing minor solar and other energy efficiency measures in new Chlorine Containment Building at the Chemical Unloading Facility

Next Step #10 – Energy Resources*Hydropower*

- Examined all existing hydro-electric power (HEP) plants as well as pressure control structures; identified two existing HEP plants which may be expanded to increase energy production and three pressure control structure locations that could support a new HEP plant. Projects are in the study phase.
- Retrofitted hydro-electric generation capability into Wadsworth Pumping Plant at DVL
- Current and future operations and maintenance activities evaluated daily to assure most effective HEP plant generation
- Retrofit of Yorba Linda HEP in design; when completed, generation output will either reduce retail electricity consumption at Diemer or be sold to electric utilities to assist in meeting their renewable portfolio standard requirement of 33 percent by the year 2020.
- Increase value of new contracts for the sale of energy from Metropolitan's HEP plants due to the plants certification as renewable generators

Energy Management and Efficiency

- Energy efficiency features incorporated into all projects where cost-effective
- Renewable energy projects (e.g. photovoltaic solar) analyzed to consider cost effectiveness and economic benefit to Metropolitan before projects move into design
- Efficiency improvements at water treatment facilities implemented following energy audits conducted by power utilities, including HVAC system and lighting upgrades
- Periodic report to the Board on status of implementing Energy Management Study recommendations
- Completed energy efficiency audits of Metropolitan facilities with energy providers; evaluating the constantly changing energy efficiency and renewable energy incentives and rebate programs offered by energy providers and governmental agencies
- Purchasing most cost-effective, reliable energy; constantly evaluating energy options for the Colorado River Aqueduct (CRA) and treatment facilities (pricing and reliability)
- Study underway to evaluate additional energy efficiency and conservation measures at Union Station

Greenhouse Gas Emissions

- Voluntary annual reporting to the Climate Registry on Greenhouse Gas (GHG) emissions (beginning with 2005 report)
- Reporting a portion of annual GHG emissions to the California Air Resources Board under mandatory reporting regulations (beginning 2009)
- Participating in the development of the cap-and-trade program by the California Air Resources Board; the program will assist in reducing greenhouse gas emissions in California

Next Step #10 – Energy ResourcesLeasing to Third Parties

- Metropolitan has an active leasing program through which property is leased to third parties for potential solar power generation. Current leases may generate up to 850 MW once completed with additional leases in the planning stages.

Next Step #11 – Regionally Connected System

Business Model Element: Provider of Integrated Water Services
Next Step: Identify potential major elements of a more regionally connected system – including a review of previous studies of groundwater storage-system potential – and identify gaps in regional conveyance and storage capacity
Standing Committees: Engineering and Operations Water Planning and Stewardship

Applicable Policy: X Yes No

In December 2007, the Board received the Integrated Area Study that identified the following non-codified policy:

“In a number of cases, the Board has stated that one of Metropolitan’s goals is to construct a reliable and flexible system. Storage, interconnections, alternative raw water sources for treatment plants, and multiple routes for delivering water are ways to accomplish this. (Technical Report – Criteria for Meeting Water Demands (March 1989).”

Implementation Process: X Yes No

Metropolitan periodically conducts system overview studies and integrated area studies in response to Integrated Water Resources Plan (IRP) updates and changes in supply or demand conditions. The primary purpose of the system overview studies and integrated area studies is to determine the right timing of necessary Metropolitan capital improvements in the most cost-effective manner to meet projected water demands. These studies take into account detailed analysis of water demand growth with increased water use efficiencies and available Metropolitan and local supply capacities. Different portfolios of local and Metropolitan supplies are evaluated to determine the most cost-effective and reliable way to meet those projected demands. In addition, the potential of adding regional connectivity is evaluated in conjunction with facility improvements that are either driven by demands or regulatory needs.

Current efforts:

Member agencies have requested Metropolitan to evaluate the feasibility of using Metropolitan’s distribution system for transporting groundwater among their own subagencies. As a result, Metropolitan has developed a water quality evaluation protocol for assessing potential impacts of mixing imported supplies and local water. In addition, Metropolitan has recently conducted an assessment of seawater desalination system integration practices.

Metropolitan has also made improvements to its distribution system, such as the Yorba Linda Bypass to allow replenishment of lower salinity State Water Project supplies to the Orange County groundwater basin and improvements to the San Fernando tunnel to facilitate groundwater replenishment for the City of Burbank.

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Next Step #12 – Expand Planning Partners

Business Model Element: Provider of Integrated Water Services
Next Step: Expand planning partners to include wastewater, flood control, and other agencies
Standing Committees: Water Planning and Stewardship

Applicable Policy: X Yes No

By Minute Item 48449, dated October 12, 2010, the Board adopted Metropolitan's Integrated Water Resources Plan, which recognizes that Metropolitan's regional responsibilities for water supply can only be accomplished through regional collaboration with other water management agencies.

The Board may want to adopt explicit policy principles to guide staff in expanding collaborative planning efforts.

Implementation Process: X Yes No

Metropolitan collaborates with other agencies in its planning processes and implementation of water resources strategy.

Current efforts:

Metropolitan actively participates in regional collaboration:

- Monitoring and providing technical assistance as requested by Integrated Regional Water Management (IRWM) groups in the service area
- Participating in the leadership committee as the surface water management area representative of the Greater Los Angeles Basin IRWM Group
- Charter member of the Southern California Water Commission Stormwater Task Force
- Board member of the Council for Watershed Health
- Memorandum of Understanding with Los Angeles County Sanitation Districts for the Joint Water Purification Study
- Steering committee member of the Southern California Water Dialogue Group
- Collaborating with SoCal Gas Company and Southern California Edison as part of the California Water and Energy Coalition; collaborating with energy utilities on water and energy efficiency programs and K-12 school facility symposium
- Engaging in the California Urban Water Conservation Council as a forum to develop water use efficiency policy

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Next Step #13 – Economic Analysis

Business Model Element: Provider of Integrated Water Services
Next Step: Build capabilities to analyze the economics of integrated water resource planning and management for the region
Standing Committees: Finance and Insurance Water Planning and Stewardship

Applicable Policy: X Yes No

The Metropolitan Water District Act, Section 122 [Contracts and Employment], authorizes Metropolitan to:

- Create, establish, and maintain such offices and positions as shall be necessary and convenient for the transaction of the business of the district.
- Elect, appoint and employ such officers, attorneys, agents and employees as shall be found by the board to be necessary and convenient.

By Minute Item 48449, dated October 12, 2010, the Board adopted Metropolitan's Integrated Water Resources Plan (IRP). The IRP includes the description of the Board's Strategic Policy Review process and findings. The Review process also concluded that Metropolitan should continue using an integrated water resource planning and management approach to secure overall water supply reliability for the region.

Implementation Process: X Yes No

Economic analysis is a critical element of implementing the IRP. Metropolitan is also implementing the Strategic Human Resources (HR) Plan to build analytic capability to support the IRP implementation; and short-term objectives are included in the General Manager's annual business plan. Progress in IRP implementation is reported annually to the Board. The IRP is also updated on a five-year cycle.

Current efforts:

Implementation of the IRP includes economic analysis for the evaluation and development of imported and local water resources as part of the Core Resources Strategy. This analysis is also conducted as part of the low-cost, low-risk foundational actions to advance development of supplies in the areas of recycled water, seawater desalination, stormwater, and graywater.

Metropolitan is implementing talent management strategies to develop the workforce, including building capacity to perform economic analysis. The efforts include:

- Working with Metropolitan's managers to identify critical skill gaps and assess current workforce capabilities
- Ensuring that Metropolitan has the right people for the right jobs with the right skills at the right time
- Attracting, developing and promoting talented people
- Moving from task-oriented work assignments to providing services and solutions

Next Step #13 – Economic Analysis

- Providing tuition assistance to encourage staff to advance their education

Next Step #14 –Water Trading

Business Model Element: Provider of Integrated Water Services
Next Step: Evaluate the potential benefits, costs, and constraints for water trading among members, including the implementation of several pilot projects
Standing Committees: Finance and Insurance

Applicable Policy: Yes X No

The Metropolitan Water District Act, Section 135 [Preferential Right to Purchase Water], states that each member agency has a preferential right to purchase a portion of the water served by Metropolitan for distribution by such member agency, for domestic and municipal uses within such member agency. If a member agency were to invoke its preferential rights, the purchased water could not be traded.

By Minute Item 44644, October 16, 2001, the Board adopted the current rate structure. Under the current rate structure, member agencies may request Purchase Orders for firm water supplies, offering pricing benefits for member agencies and more financial security for Metropolitan. The current Purchase Orders provide that rights thereunder cannot be assigned or transferred.

Implementation Process: Yes X No

The Board has not approved a policy to support water trading among the member agencies. To the contrary, the existing policies stated above do not permit trading of Metropolitan supplies. As such, an implementation process has not been developed.

Current efforts:

The topic of member agencies establishing Tier 1 water supply limits and ability to trade those limits is being discussed under the ongoing Rate Refinement Process (see Next Step #16).

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Next Step #15 – Long Range Finance Plan

Business Model Element: Finances and Pricing
Next Step: Develop an adaptive long-range financial plan as a complement to the IRP
Standing Committee: Finance and Insurance

Applicable Policy: X Yes No

Metropolitan adopted Long Range Finance Plans (LRFPs) in 1986, 1987, 1988, 1995, 1999, and 2004. The Board adopted these LRFPs along with financial policies that are codified in Metropolitan Administrative Code Section 5200. Also included in the LRFPs are 10-year forecasts of Metropolitan water rates, which give member agencies price signals to determine their investments in local water resources.

Implementation Process: X Yes No

The LRFP is developed in collaboration with member agencies through workshops; staff also solicits Board input through regular updates to the Finance and Insurance Committee. The LRFP is ultimately adopted by the Board.

Current efforts:

The LRFP is currently being updated. Workshops are being held with member agencies and regular updates are given to the Finance and Insurance Committee. The LRFP will reflect the water resource strategy in Metropolitan's Integrated Water Resources Plan (IRP) and any potential adjustments as a result of the Rate Refinement Process described in Next Step #16. It will review the water sales forecast, financial assumptions for the Bay-Delta improvements, Colorado River Aqueduct supply profile, and provide a 10-year water rate forecast. The LRFP is scheduled to be completed after completion of the Rate Refinement Process (see Next Step #16).

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Next Step #16 – Price Structure

Business Model Element: Finances and Pricing
Next Step: Initiate a process to review the current pricing structure in comparison to potential alternatives, evaluating the sustainability of the various options under a range of scenarios
Standing Committee: Finance and Insurance

Applicable Policy: Yes No

The Board has established its current pricing structure through the authority of the following:

- The Metropolitan Water District Act, Section 133 [Fixing of Water Rates], provides the Board the authority to fix rates at which water shall be sold. Section 134, [Adequacy of Water Rates; Uniformity of Rates], states that water rates shall result in revenue sufficient to pay expenses and shall be uniform for like classes of service throughout the district. Section 134.5 provides the authority for the Board to impose a Water Standby or Availability of Service Charge.
- The Metropolitan Administrative Code Chapter 3, Water Sales Revenue, Sections 4301 through 4304 and Chapter 4, Classification and Rates, Sections 4400 through 4405, define Metropolitan's existing rate structure and established rates.
- By Minute Item 44644, October 16, 2001, the Board adopted the current rate structure. The rate structure has three objectives: (1) maintain Metropolitan as the regional provider of imported water, (2) support cost-effective local resources development and water conservation, and (3) accommodate a water market with unbundled water rates.

Implementation Process: Yes No

The rate structure review is conducted periodically in response to changed conditions. The rate structure review is conducted in collaboration with member agencies through workshops; staff also solicits Board input through regular updates to the Finance and Insurance Committee. Changes in rate structures are adopted by the Board.

Current efforts:

Metropolitan engaged member agencies and the Board to discuss refinement to the rate structure beginning in mid-2007. Outcomes of these discussions include: (1) elimination of the Interim Agricultural Water Program, (2) increase the rate differential between Tier 1 and Tier 2 water supply, (3) implementation of the Delta Supply Surcharge, and (4) affirmation of the cost-of-service approach.

Metropolitan is currently conducting a Rate Refinement Process with a series of member agency meetings and regular updates to the Finance and Insurance Committee. An initial Board workshop will be scheduled in the next several months. Rate refinements will be proposed for Board consideration in 2012.

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Next Step #17 – Value Engineering

Business Model Element: Finances and Pricing
Next Step: Review all major cost components and apply value-engineering principles to the process of identifying opportunities for cost savings
Standing Committee: Engineering and Operations Finance and Insurance

Applicable Policy: X Yes No

Metropolitan reviews all major cost components in its biennial budget process, which is defined in Metropolitan Administrative Code Section 5107. Metropolitan also applies value-engineering as a good management/business process.

Implementation Process: X Yes No

The Capital Investment Plan is evaluated annually during the budget process first by a staff review committee with representatives from all business groups and the auditor. The proposed Capital Investment Plan is then presented to the Board for review. Each department and business group also reviews its budget annually with the appropriate Board standing committee. Board workshops are held to review all major cost components. Finally, the Board adopts a rolling two-year budget each year.

During the normal course of business, all engineering projects exceeding \$2 million are subject to a value-engineering process involving an independent third-party review. Metropolitan also conducts value-engineering review on smaller projects and its operations on a case-by-case basis. In addition, a quality assurance team with members from Engineering and WSO periodically assess treatment plant processes and performance to ensure compliance with drinking water regulations and reduce costs.

Current efforts:

See Implementation Process described above.

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Next Step #18 – Governance Structure

Business Model Element: Governance and Operations
Next Step: Initiate an external review of governance structure
Standing Committee: Executive Committee

Applicable Policy: Yes X No

Metropolitan's existing governance structure is established in several documents including:

- Metropolitan Water District Act Part 3, Internal Organization
- Metropolitan District Administrative Code, Division 2, Procedures Pertaining to Board Committee and Directors
- By Minute Item 43665, dated August 17, 1999, the Board adopted the Carver Model Policy Statements

Implementation Process: Yes X No

The Board has historically reviewed its own governance, as needed. External review has not been used except for overarching advice, such as the creation of the Blue Ribbon Task Force in 1993 and Blue Ribbon Committee in 2010.

Current efforts:

The Legal Department reviews governance practices and advises on compliance with existing laws and policies, including the MWD Act, the Brown Act, and the Administrative Code.

An external review of governance structure is not currently planned.

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Next Step #19 – Vision and Mission Statement

Business Model Element: Governance and Operations
Next Step: Begin a process to consider changes to the existing vision and mission statements
Standing Committee: Executive Committee

Applicable Policy: Yes No

By Minute Item 39306, dated November 19, 1991, the Board adopted the existing mission statement.

Implementation Process: Yes No

The Board completed a Strategic Policy Review process through a series of three workshops in August through November 2009 to evaluate Metropolitan's future role in the region and its mission. The outcome of the process concluded that Metropolitan should continue to explore ways of increasing regional reliability; adopt an adaptive management approach for the future; continue to develop its core supplies; diversify its role in developing regional water supply; and explore various options under which the region can pursue cooperative development of beneficial projects. The Strategic Policy Review outcomes formed the building blocks for a comprehensive adaptive management approach as the foundation for the 2010 Integrated Water Resources Plan (IRP). The Board also completed a Strategic Plan process in 2000 prior to the IRP Update adopted in 2004 and the Strategic Assembly process in 1995 leading up to the 1996 IRP.

Metropolitan does not have a formal vision statement.

Current efforts:

The Strategic Policy Review process was completed in November 2009.

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Next Step #20 – Brand as Global Leader

Business Model Element: Leadership in Technology and Workforce Development
Next Step: Brand Metropolitan as a global leader on efficient and innovative water management and technologies
Standing Committees: Communications and Legislation

Applicable Policy: Yes No

Metropolitan has established policies for specific technical areas that support innovation:

- Water Use Efficiency: By Minute Item 48772, dated August 16, 2011, the Board adopted the Long-term Conservation Plan (LTCP) and revisions to the Water Conservation Policy Principles. The Policy Principles include providing leadership in advancing new or untapped water conservation practices and encouraging research and development of promising activities.
- Energy Management: By Minute Item 48371, dated August 17, 2010, the Board adopted the Energy Management Policies, including a policy to pursue cost-effective renewable energy projects and opportunities to hedge against energy price increases and regulatory risks, while reducing Metropolitan's carbon footprint.
- Water Quality: By Minute Item 42820, dated February 10, 1998, the Board adopted the Source Water Quality Protection Policy Principles that support federal and state legislative and regulatory proposals to establish source water quality protection programs, including innovative approaches to source water quality protection.
- Seawater Desalination: By Minute Item 44356, dated February 13, 2001, the Board updated the Policy Principles on Brackish and Seawater Desalination, including a policy to promote desalination research and innovation through collaboration that competitively funds projects that provide benefits to the development of desalination for the region.

Implementation Process: Yes No

Metropolitan develops leadership roles within each technical area as new needs emerge.

Metropolitan has been recognized as a leader in the water service industry through its participation and leadership roles in statewide and national industry organizations and publications in industry journals.

Current efforts:

Metropolitan's current efforts to advance efficient and innovative water management and technologies include:

- Sponsoring outreach events to encourage and showcase technology and innovation: e.g. Solar Cup, World Water Forum, Spring Green Fair
- Providing consumer information on water efficient technologies and innovation through www.bewaterwise.com
- Participating in external events and conferences related to innovation and technology development in the water industry

Next Step #20 – Brand as Global Leader

- Implementing the Innovative Conservation Program to help evaluate the water savings potential and functional reliability of new water efficient devices, technologies, and strategies
- Participating in small business networks and engaging non-governmental organizations in the development of new water management technologies
- Serving in leadership roles in key water industry research organizations (e.g., Water Research Foundation, CalDesal, WateReuse Research Foundation, and WateReuse Association)
- Metropolitan helped establish the Alliance for Water Efficiency, a national organization that is dedicated to the efficient and sustainable use of water.
- Delivering presentations at various technology forums (e.g., Water Quality Technology Conference)
- Metropolitan incorporates energy efficiency measures and generates renewable energy in its owned and operated facilities where cost-effective.

Next Step #21 – Water Service and Technology Region

Business Model Element: Leadership in Technology and Workforce Development
Next Step: Consider different types of opportunities for taking a lead role in fostering a water service and technology innovative region
Standing Committees: Engineering and Operations Organization, Personnel and Technology Water Planning and Stewardship

Applicable Policy: X Yes No

Metropolitan has several policies that recognize the importance of innovation within specific technical areas:

- Source Water Quality: By Minute Item 42820, dated February 10, 1998, the Board adopted the Source Water Quality Protection Policy Principles that support federal and state legislative and regulatory proposals to establish source water quality protection programs, including innovative approaches to source water quality protection.
- Seawater Desalination: By Minute Item 44356, dated February 13, 2001, the Board updated the Brackish and Seawater Desalination Policy Principles, including a policy to promote desalination research and innovation through collaboration that competitively funds projects that provide benefits to the development of desalination for the region.
- Energy Management: By Minute Item 48371, dated August 17, 2010, the Board adopted the Energy Management Policies including a policy to pursue cost-effective renewable energy projects and opportunities to hedge against energy price increases and regulatory risks, while reducing Metropolitan's carbon footprint.
- Integrated Resources Planning: By Minute Item 48449, dated October 12, 2010, the Board adopted Metropolitan's Integrated Water Resources Plan, which identifies foundational actions for water recycling, graywater, stormwater, and seawater desalination.
- Water Use Efficiency: By Minute Item 48772, dated August 16, 2011, the Board adopted the Long-term Conservation Plan and revisions to the Water Conservation Policy Principles, including support for Metropolitan's leadership in advancing new or untapped water conservation practices and encouraging research and development of promising activities.

Implementation Process: X Yes No

Metropolitan develops leadership roles within each technical area as new needs emerge.

Next Step #21 – Water Service and Technology Region

Current efforts:

Metropolitan's current efforts to foster a water service and technology innovative region include:

- Pursuing grants from research foundations and state and federal sources
- Publishing in industry journals
- Participating in professional research organizations
- Sponsoring annual outreach events to encourage and showcase technology innovation: e.g. Solar Cup, World Water Forum, Spring Green
- Providing consumer information on innovation and water efficient technologies through www.bewaterwise.com
- Implementing the Information Technology Strategic Plan, which leverages information technology investments to increase long-term reliability

Efforts by technical area include:

Water Quality

- Evaluating and developing analytical procedures and methods for existing and emerging constituents of regulatory concern
- Evaluating distribution system integration issues to accept alternative sources of water (e.g., desalinated seawater and re-purified wastewater)
- Evaluating and developing water treatment technologies to improve effectiveness and efficiencies
- Collaborating with universities in research and development of water quality topics
- Conducting issue-based analytical research

Information Technology

- Developing cloud computing capabilities
- Expanding use of mobile technologies

Engineering

- Evaluating infrastructure monitoring and assessment technologies
- Evaluating infrastructure construction, repair and rehabilitation methodologies
- Identifying cost effective, environmentally friendly materials and coatings
- Utilizing state-of-the-art dam monitoring and 3D scanning technologies
- Optimizing engineering design and document management process
- Utilizing value engineering and systematic CIP project evaluation process
- Continuing development of small hydro projects when cost-effective

Water Use Efficiency

- Implementing the Innovative Conservation Program to help evaluate the water savings potential and functional reliability of new water efficient devices, technologies, and strategies

Next Step #21 – Water Service and Technology Region

- Implementing pilot programs to evaluate new technologies
- Participating in industry-based code development processes
- Serving on the state's Commercial, Industrial, and Institutional Task Force to evaluate best practices and water savings opportunities for this sector

Integrated Resource Planning

- Evaluating uncertainties in supply side modeling and demand forecasting
- Incorporating climate change science into resource planning
- Providing leadership in developing case studies with the American Water Works Association, the Association of California Water Agencies, and the Association of Metropolitan Water Agencies

Energy Management and Efficiency

- Incorporating energy efficiency features into all facilities and projects where cost-effective
- Considering renewable energy projects where feasible and cost-effective
- Performing improvements and upgrades at water treatment plants following energy audits conducted by power utilities
- Purchasing most cost-effective, reliable energy and constantly evaluating energy options for the Colorado River Aqueduct and treatment facilities

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Next Step #22 – Workforce Planning

Business Model Element: Leadership in Technology and Workforce Development
Next Step: Begin a strategic planning process to assess needs and actions to shape a workforce that meets the needs of new business model, including new training and development programs to increase qualified personnel to meet workforce needs and reflect the region's diversity
Standing Committees: Organization, Personnel, and Technology

Applicable Policy: X Yes No

The Metropolitan Water District Act, Section 122 [Contracts and Employment], authorizes Metropolitan to:

- (b) Create, establish, and maintain such offices and positions as shall be necessary and convenient for the transaction of the business of the district.
- (c) Elect, appoint and employ such officers, attorneys, agents and employees as shall be found by the board to be necessary and convenient.

The Metropolitan Water District Administrative Code Section 6300 states Metropolitan's Equal Employment Opportunity Policy. Section 6301 directs Metropolitan to undertake good faith efforts to assure that equal treatment is accorded all applicants and employees in all matters affecting employment, including but not limited to, recruitment, selection, transfer, promotion, discipline, demotion, discharge, training, and benefits.

Implementation Process: X Yes No

The General Manager's FY 2011/12 Business Plan identifies human resources excellence as a core business activity. Metropolitan is implementing the five-year Strategic Human Resources (HR) Plan to provide the right talent and skills for the future.

Current efforts:

Metropolitan's efforts to implement the Strategic HR Plan include:

- Developing a comprehensive Integrated Talent Management Framework to develop the workforce through planning, talent acquisition, retention, learning and development, high standards of performance, leadership development and succession management
- Formalizing Future Trends Workshops with senior managers to keep Metropolitan abreast of 21st century work design issues, identify critical skill gaps, and assess current workforce capabilities
- Analyzing workforce demographics to identify diversity gaps
 - Affirmative Action Plan for Disabled Veterans and Women
 - Focusing recruitment outreach to increase diversity of qualified applicants for open positions
- Integrating technology advancements within Metropolitan's operations to meet industry standards and expectations of future workforce

Next Step #22 – Workforce Planning

- Providing training for existing workforce to increase productivity
- Preparing a Total Compensation Strategy to ensure Metropolitan can attract and retain key personnel
- Expanding Metropolitan's web-based recruiting tools to reach a large field of potential applicants and streamline internal selection processes
- Defining critical competencies and integrating them into job descriptions
- Participating in the Western Regional Intergovernmental Personnel Assessment Council with other public agencies from California, Nevada, and Arizona to better understand labor market issues, emerging trends, and challenges
- Collaborating with the American Water Works Association and other water agencies on workforce development strategies, including standardizing job descriptions and testing so agencies can share pool of labor resources
- Coordinating with Workforce Investment Bureaus to encourage job and workforce development with skill-sets that meet water industry needs
- Encouraging development of educational and vocational programs through:
 - Engineering Cooperative Education Program in cooperation with the Cal Poly Pomona Foundation
 - College of the Canyons Water Technology Advisory Council
 - California State University – Fresno advisory panel
 - Los Angeles Harbor College Workforce and Green Communities Advisory Council
 - Santiago Canyon College Water Utility Science Program advisory board and Apprenticeship Program Local Education Agency affiliate (Metropolitan's accredited curriculum underwriter/approver)
 - Riverside County Department of Education Vocational Technical Education Advisory Council
 - Career and Technical Education Center at the Pomona Fairplex
- Providing internship and apprenticeship opportunities:
 - MWD Internship Program provides practical work experience to train, educate and prepare pre-professionals for careers in the water industry
 - MWD Pre-Apprenticeship/Apprenticeship Programs, administered through Water System Operations Technical Training, provides State-certified entry to journey-level skills training in technical, vocational and trades occupations