

**MWD**

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

*Executive Office*

**Via electronic mail**

September 23, 2010

Lynne Heidel  
Keith Lewinger  
Bud Pocklington  
Fern Steiner  
San Diego County Water Authority  
4677 Overland Avenue  
San Diego, CA 92123-1233

**Re: Comments on Appendix A**

Dear SDCWA Directors:

Thank you for your careful review of Appendix A. As you know, Metropolitan believes in full and complete disclosure to the marketplace. This is one reason that Metropolitan's long-term revenue bonds are rated AAA/Aa1/AAA and the general obligation bond ratings are rated AAA/Aaa/AAA by Standard & Poor's, Moody's and Fitch.

Consistent with Metropolitan's standard diligence process, we provided the draft of Appendix A to all directors and requested comments to assure full and complete bond disclosure. The latest version of Appendix A, including changes incorporated in response to your comments and suggestions, will be included in the offering document associated with Metropolitan's upcoming sale of approximately \$40 million of general obligation refunding bonds. These bonds, the debt service of which is paid from ad valorem taxes, will be used to refund outstanding general obligation bonds with higher interest rates, saving approximately \$2 million on a net present value basis.

After discussions with Metropolitan's General Counsel, outside Bond Counsel, Underwriter's Counsel and other members of the financing team, we have modified Appendix A to address the comments in your letter. The revisions include the following areas (see Attachment A for changed pages):

- a. Integrated Resources Plan. We have described the IRP Update process, making it clear that the IRP Update is a proposed framework for future reliability and that any Metropolitan projects would require future board approval and action. We have noted

that the IRP Update will be considered at the October board meeting and has not yet been approved.

- b. Water sales. As you correctly note, water sales in fiscal years 2008/09 and 2009/10 have been lower than prior years for a variety of reasons, several of which are listed in Appendix A. One important factor is that Metropolitan has been in a Water Supply Allocation. In addition, the economy has been in its deepest recession since the Great Depression. Combined with weather, cutbacks to replenishment deliveries, the coolest summer in decades, higher prices, and higher available supplies from the Owens Valley, water sales are at levels not seen since the mid 1990s. Future sales levels remain uncertain, but we have incorporated trends included in the IRP and budget in the five year forecast included in Appendix A.
- c. Seawater Desalination Subsidies. You will see that we have revised the discussion of the Carlsbad Project to more clearly reflect the fact that neither Metropolitan nor SDCWA have executed the contract.
- d. Near-term Delta Actions. We have updated the discussion of the Two-Gate Project, highlighting the uncertainty of this project.
- e. Five-year Supply Plan. We have modified the document to reflect those actions (e.g., transfers) that have taken place, and highlighted the uncertainty associated with local resource development over the next five years.

Having reviewed your suggestions and, after extensive consultation with internal counsel, external bond counsel, and underwriter's counsel, we believe that the revised document provides complete and accurate disclosure of material facts relevant to owners and potential owners of Metropolitan's general obligation bonds and water revenue-supported obligations. As you know, we are on schedule to price general obligation bonds next week. Having considered and incorporated your comments, we are moving forward with our proposed financing schedule to capture savings for taxpayers. As such, we will be posting the revised offering document today in order to provide sufficient time to prepare the marketplace for this offering. We will have a brief discussion of these issues at Executive Committee on September 28, and have modified the Business and Finance Committee agenda to provide time for a more detailed discussion of these issues at its meeting in October.

In the meantime, please contact me at 213-217-7121 or [bthomas@mwddh2o.com](mailto:bthomas@mwddh2o.com) or Assistant General Counsel Sydney Bennion at 213-217-6517 or [sbennion@mwddh2o.com](mailto:sbennion@mwddh2o.com).

SDCWA Directors  
September 23, 2010  
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Thanks again for your participation in this process.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Brian G. Thomas". The signature is fluid and cursive, with the first name "Brian" being more prominent.

Brian G. Thomas  
Assistant General Manager/Chief Financial Officer

C: Board of Directors

J. Kightlinger

K. Tachiki

S. Bennion

BGT:jmm

## APPENDIX A

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### The Metropolitan Water District of Southern California

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statewide hydrologic conditions and significant precipitation and snowfall, resulting in above-normal snowpack in the northern Sierras. Below-average precipitation in the Upper Colorado River Basin continued through spring 2010, resulting in April through July runoff above Lake Powell at 73 percent of normal. As of September 2010, Lake Mead's elevation had dropped to 1,086 feet above sea level, the lowest elevation since 1956. Programs and projects for addressing these challenges over the five years from 2010 to 2014 are described under "METROPOLITAN'S WATER SUPPLY—Five-Year Supply Plan" in this Appendix A.

### **Integrated Water Resources Plan**

Metropolitan, its member agencies, sub-agencies and groundwater basin managers developed an Integrated Water Resources Plan ("IRP") that was adopted by the Board in January 1996 as a long-term planning guideline for resources and capital investments. The purpose of the IRP was the development of a preferred resource mix (see "METROPOLITAN'S WATER SUPPLY—The Preferred Resource Mix" in this Appendix A) to meet the water supply reliability and water quality needs for the region in a cost-effective and environmentally sound manner.

In 2004, the Board adopted an updated IRP that reviewed the goals and achievements of the original IRP, identified changed conditions for water resource development and updated the resource targets through 2025. A key component of the updated plan was the addition of a planning buffer. The planning buffer provided for the identification of additional supplies, both imported and locally developed, to address uncertainty in future supplies and demands from factors such as the level of population and economic growth which directly drive water demands, water quality regulations, new chemicals found to be unhealthful, endangered species affecting sources of supplies, and periodic and new changes in climate and hydrology.

Metropolitan is currently working on the next IRP update (the "2010 IRP Update"), to evaluate supply reliability while incorporating changed conditions and new trends and managing uncertainties. It is expected to be completed in late 2010. The draft 2010 IRP Update is a planning framework being formulated with input from member agencies, retail water agencies, and other stakeholders including water and wastewater managers, environmental and business interests and the community. It reviews the goals and achievements of the current IRP, identifies changed conditions for water resource development, and updates resource targets through 2035. The 2010 IRP Update is scheduled for consideration by the Board on October 12, 2010. The current draft of the 2010 IRP Update is available on Metropolitan's web site at <http://www.mwdh2o.com/mwdh2o/pages/yourwater/irp/>. This draft is subject to revision before consideration by the Board and may be further amended by the Board. Specific projects that may be developed by Metropolitan in connection with the implementation of the IRP will be subject to future Board consideration and approval, as well as environmental and regulatory documentation and compliance. The information set forth on Metropolitan's web site is not incorporated by reference.

### **The Preferred Resource Mix**

Metropolitan's principal sources of water are the State Water Project and the Colorado River. The IRP's Preferred Resource Mix identifies a balance of local and imported water resources within Metropolitan's service area. Metropolitan expects that the resource targets and capital expenditure strategies for the Preferred Resource Mix will be continually reviewed and updated at least every five years to reflect changing demand and supply conditions.

The following paragraphs describe the elements of the Preferred Resource Mix.

*State Water Project.* State Water Project supplies are important for maximizing local groundwater potential and the use of recycled water since State Water Project water has lower salinity content than Colorado River Aqueduct water and can be used to increase groundwater conjunctive use applications. See

“METROPOLITAN’S WATER SUPPLY—State Water Project” and “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

*Colorado River Aqueduct.* The Colorado River Aqueduct delivers water from the Colorado River, Metropolitan’s original source of supply. Metropolitan has helped to fund and implement farm and irrigation district conservation programs, improvements to river operation facilities, land management programs and water transfers and exchanges through arrangements with agricultural water districts in southern California and entities in Arizona and Nevada that use Colorado River water. See “METROPOLITAN’S WATER SUPPLY—Colorado River Aqueduct” in this Appendix A.

*Water Conservation.* Conservation and other water use efficiencies are integral components of Metropolitan’s IRP. Metropolitan has invested in conservation programs since the 1980’s. Historically, most of the investments have been in water efficient fixtures in the residential sector. Current efforts also focus on outdoor water use, including landscaping and commercial/industrial uses. See “METROPOLITAN’S WATER SUPPLY—Water Conservation” in this Appendix A.

*Recycled Water.* Reclaimed or recycled municipal and industrial water is not potable, but can be used for maintaining lawns, protecting groundwater basins from saltwater intrusion, industrial processes, and recharging local aquifers. Metropolitan offers financial incentives to member agencies for developing economically viable reclamation projects. See “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

*Conjunctive Use.* Conjunctive use is the coordinated use of surface water supplies and water storage. It entails storing surplus imported water during the winter months or wet years in local surface reservoirs and recharging local groundwater basins, then using the stored supplies during dry months and droughts, thus increasing the supply reliability of the region. See “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

*Water Transfers.* Under voluntary water transfer agreements, agricultural communities using irrigation water may periodically sell some of their water allotments to urban areas. The water is delivered through existing State Water Project or Colorado River Aqueduct facilities. Metropolitan’s policy toward potential transfers states that the transfers must not harm the environment or contribute to the mining of local groundwater supplies. See “METROPOLITAN’S WATER SUPPLY—Water Transfer, Storage and Exchange Programs” in this Appendix A.

*Groundwater Recovery.* Natural groundwater reservoirs serve an important function as storage facilities for local and imported water. When groundwater storage becomes contaminated, water agencies have to rely more heavily on imported water supplies. Treatment for polluted groundwater is quite costly and poses environmental challenges. Metropolitan offers financial incentives to help fund member agency groundwater recovery projects. See “REGIONAL WATER RESOURCES—Local Water Supplies” in this Appendix A.

*Seawater Desalination.* Metropolitan has a long-term seawater desalination goal of 150,000 acre-feet per year by 2020, and has signed agreements with three of its member agencies to provide incentives of up to \$250 per acre-foot for desalinated seawater supplies. The proposed desalination projects are anticipated to produce up to 46,000 acre-feet of desalted seawater annually. (An acre-foot is the amount of water that will cover one acre to a depth of one foot and equals approximately 326,000 gallons, which represents the needs of two average families in and around the home for one year.) On November 10, 2009, Metropolitan ~~has~~ approved a similar incentive agreement with the San Diego County Water Authority (“SDCWA”) and nine of its local retail agencies for water from a proposed desalination project in Carlsbad, anticipated to produce 56,000 acre-feet per year. The Carlsbad Seawater Desalination Project (the “Carlsbad Project”) has obtained permits from the California Coastal Commission, State Lands Commission and San Diego Regional Water Quality Control Board to begin construction of the project. However, litigation challenging some of these approvals as

well as the project's environmental documentation is pending. ~~SDCWA has not executed the proposed agreement with Metropolitan and on~~ On July 22, 2010~~2010~~, SDCWA approved terms and conditions for an alternative agreement to purchase water from the Carlsbad Project. ~~Neither SDCWA nor Metropolitan has executed the incentive agreement authorized by Metropolitan, as a result of the change in structure of the agreement and litigation initiated by SDCWA challenging Metropolitan's rate structure that, under the agreement's terms, could trigger proceedings for termination of the agreement. See "REGIONAL WATER RESOURCES—Local Water Supplies" and "METROPOLITAN REVENUES—Rate Structure" in this Appendix A.~~

### **State Water Project**

*General.* One of Metropolitan's two major sources of water is the State Water Project, which is owned by the State and operated by the California Department of Water Resources ("DWR"). This project transports Feather River water stored in and released from Oroville Dam and unregulated flows diverted directly from the San Francisco Bay/Sacramento-San Joaquin River Delta ("Bay-Delta") south via the California Aqueduct to four delivery points near the northern and eastern boundaries of Metropolitan's service area. The total length of the California Aqueduct is approximately 444 miles.

In 1960, Metropolitan signed a contract (as amended, the "State Water Contract") with DWR. Metropolitan is one of 29 agencies that have long-term contracts for water service from DWR, and is the largest agency in terms of the number of people it serves (almost 19 million), the share of State Water Project water that it has contracted to receive (approximately 46 percent), and the percentage of total annual payments made to DWR by agencies with State water contracts (approximately 58 percent in 2009). For information regarding Metropolitan's obligations under the State Water Contract, see "METROPOLITAN EXPENDITURES—State Water Contract Obligations" in this Appendix A. Upon expiration of the State Water Contract term (currently in 2035), Metropolitan has the option to continue service under substantially the same terms and conditions. Metropolitan presently intends to exercise this option to continue service to at least 2052.

The State Water Contract, under a 100 percent allocation, provides Metropolitan 1,911,500 acre-feet of water. Water received from the State Water Project by Metropolitan over the past eight years (2002 through 2009), including water from water transfer, groundwater banking and exchange programs, described below under "METROPOLITAN'S WATER SUPPLY—Water Transfer, Storage and Exchange Programs", varied from a low of 908,000 acre-feet in calendar year 2009 to a high of 1,800,000 acre-feet in 2004. For calendar year 2009, DWR's allocation to State Water Project contractors was 40 percent of contracted amounts, reflecting low water storage in the State's major reservoirs, below-normal runoff and regulatory restrictions on water exports from the Bay-Delta to protect listed fish species. (See "*—Endangered Species Act Considerations*" below.) Under the 40 percent allocation, Metropolitan received 765,000 acre-feet from its basic allocation, with 908,000 acre-feet of total water delivered from the State Water Project in 2009, including supplies from water transfers, exchanges and related Five-Year Supply Plan actions delivered through the California Aqueduct. See "METROPOLITAN'S WATER SUPPLY—Water Transfer, Storage and Exchange Programs and "*—Five-Year Supply Plan*" in this Appendix A.

Due to drought conditions and the court-ordered restrictions described under "*—Endangered Species Act Considerations*" below, California Governor Arnold Schwarzenegger issued a proclamation on February 27, 2009 declaring a statewide drought emergency. The proclamation requests that all urban water users in California increase water conservation and directs that various state agencies take action to address impacts of the drought. These actions include expediting approvals for water transfers (provided that such transfers do not injure other legal users of water or unreasonably affect fish and wildlife); pursuing short-term efforts, such as installation of temporary barriers in the Bay-Delta, to protect water quality and water supply; and expediting regulatory consideration of proposed modifications to Bay-Delta water quality standards. Although cold Pacific storms in April and May significantly improved water supply outlook conditions, as of September 1, 2010, DWR has classified the water year as below normal and the statewide drought emergency is still in effect.

*Footnotes continued from prior page*

- (5) Metropolitan's State Water Project carryover capacity ranges from 100,000 to 200,000 acre-feet, on a sliding scale that depends on the final State Water Project allocation. At allocations of 50 percent or less, Metropolitan may store 100,000 acre-feet, and at allocations of 75 percent or greater, Metropolitan may store up to 200,000 acre-feet. For the purposes of this table, the highest possible carryover capacity is displayed.
- (6) Metropolitan has historically had access to Desert Water Agency/Coachella Valley Water District Article 56 carryover water. In 2009 Metropolitan stored non-State Water Project water in the San Luis Reservoir under the terms of its State Water Contract. It is listed as "n/a" due to the unpredictable nature of the actual storage capacity available.
- (7) Includes emergency storage in Metropolitan's reservoirs: 319,000 acre-feet in 2008 and 2009, and 292,000 acre-feet in 2010.

As a result of increased state Water Project supplies and reduced demands in 2010, Metropolitan is rebuilding its storage after several years of withdrawals. As of August 31, 2010, Metropolitan had stored over 125,000 acre-feet of State Water Project supplies in Central Valley groundwater storage programs. In addition, storage in Diamond Valley Lake as of that date was approximately 513,700 acre-feet, an increase of about 132,000 from Diamond Valley Lake's level at January 1, 2010. If current supply and demand trends continue, Metropolitan plans to increase storage by approximately 600,000 acre-feet in 2010.

### **Five-Year Supply Plan**

In April 2008, Metropolitan staff began working with Metropolitan's member agencies on a Five-Year Supply Plan to identify specific resource and conservation actions over a five year period, in order to manage water deliveries under continued drought conditions and court-ordered restrictions. The Five-Year Supply Plan focuses on six categories of resource options to improve Metropolitan's reliability from 2010 through 2014. These categories are:

*Water Conservation.* The Five-Year Supply Plan targets water conservation strategies to increase and accelerate conservation savings by increasing the use of water efficient devices, affecting water use practices in Southern California and identifying and reducing prohibited uses of water. Key components of this strategy include: (1) increased outreach to heighten the public's awareness of the need to conserve; (2) increased resources and support for water use ordinances and conservation-based rate structures to motivate conservation; and (3) accelerated installation of water efficient devices. See "METROPOLITAN'S WATER SUPPLY—Water Conservation" in this Appendix A.

*Colorado River Transactions.* Metropolitan continues to pursue additional Colorado River supplies such as the one-year supplemental fallowing program within PVID that was implemented in 2009 and 2010. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct—General" in this Appendix A. Metropolitan, SNWA, the Colorado River Commission of Nevada and the Central Arizona Water Conservation District are participating with the Bureau of Reclamation in the pilot operation of the Yuma Desalting Plant that is expected to yield up to 27,000 acre-feet in 2010. New initiatives also include expansion of the 2004 storage and interstate release agreement with SNWA (see "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct—Interim Surplus Guidelines") and an agreement with CVWD (see "METROPOLITAN'S WATER SUPPLY—Water Transfer, Storage and Exchange Programs—Metropolitan/CVWD/Desert Water Agency Exchange and Advance Delivery Agreement").

*Near-Term Delta Actions.* Near-term Bay-Delta actions being developed include measures that protect fish species and reduce supply impacts, such as habitat and hatchery projects, and physical and operational actions with the goal of reducing conflicts between water supply conveyance and environmental needs. The proposed Two-Gate System would provide movable barriers on the Old and Middle Rivers to modify flows and prevent vulnerable fish from being drawn toward the Bay-Delta pumping plants. The Two-Gate System, if undertaken, is anticipated to protect fish habitat while allowing up to an estimated additional 150,000 acre feet per year of water supply export to be exported from the Bay-Delta in years when the allocation for State Water Project contractors exceeds 35 percent. The proposed Two-Gate System is subject to operational studies, monitoring, environmental documentation and compliance, acquisition of right-of-way and completion of



design and construction. Studies of the impact of the Two-Gate System on the operations of the Bay-Delta and effects on fisheries and boating are ongoing.

*State Water Project Transactions.* The Five-Year Supply Plan includes water transfers from willing sellers located upstream of the Bay-Delta to buyers located downstream of the Bay-Delta through the State Water Project and Central Valley Project. Delivery of transfers is contingent on sufficient capacity for export of this water through the Bay-Delta. The Five-Year Supply Plan also includes additional transfers with entities within the Bay-Delta (see “—Water Transfer, Storage and Exchange Programs” above) and investigations into the feasibility of crop rotation demonstration projects with Kern County agencies, as well as the return of stored transfer water. Through an exchange with Santa Clara Valley Water District, Metropolitan is expecting to move about 38,000 acre-feet of water previously stored in Shasta Lake into Diamond Valley Lake. ~~In addition, Metropolitan may take up to 27,500 acre-feet of State Water Project water over the next three years available under a water transfer between North Kern Water Storage District and Desert. This water, along with approximately 8,500 acre-feet of water transferred to Metropolitan in 2008, will be returned to Desert in increments of 1,200 acre-feet per year over the next 30 years.~~

*Groundwater Recovery.* Groundwater that requires treatment and recovery for consumptive use is a resource that has the potential to yield significant amounts of supply. Based on groundwater inventories conducted by Metropolitan and the member agencies, it is estimated that there is over 300,000 acre-feet of groundwater that could be treated and recovered in Metropolitan’s service area. Additionally, it is estimated that the Hayfield groundwater basin located adjacent to the Colorado River Aqueduct has 70,000 to 100,000 acre-feet that could be extracted over the next five to ten years. Also, more than 300,000 acre-feet of recovered groundwater accumulated from agricultural drainage in the San Joaquin Valley could be made available to Metropolitan if Metropolitan funds groundwater treatment facilities.

*Local Resources.* Metropolitan is working with its member agencies to determine which local projects could be expanded and/or accelerated with a potential to be on line by 2013. Local projects include recycled water treatment plants, groundwater recovery plants, desalination plants, and new hookups to existing recycled plants. Over 50 potential projects have been identified. The combined annual yield for these efforts has the potential to grow to approximately 122,000 acre-feet by 2014. If, and when, any of these local projects will be implemented cannot be determined at this time and the impacts of such projects have not been included in the five-year forecast, included in this Appendix A

## **Water Conservation**

The central objective of Metropolitan’s water conservation program is to help ensure adequate, reliable and affordable water supplies for Southern California by actively promoting efficient water use. The importance of conservation to the region has increased in recent years because of drought conditions in the State Water Project watershed and court-ordered restrictions on Bay-Delta pumping, as described under “METROPOLITAN’S WATER SUPPLY—State Water Project” in this Appendix A. Water conservation is an integral component of Metropolitan’s IRP, Preferred Resource Mix, Five-Year Supply Plan, Water Surplus and Drought Management Plan and Water Supply Allocation Plan, each described in this Appendix A under “METROPOLITAN’S WATER SUPPLY.”

Metropolitan’s conservation program has largely been developed to assist its member agencies in meeting the “best management practices” (“BMP”) of the California Urban Water Conservation Council’s Memorandum of Understanding Regarding Urban Water Conservation in California (“CUWCC MOU”) and to meet the conservation goals of the 2004 IRP Update. See “—Integrated Water Resources Plan” in this Appendix A. Under the terms of the CUWCC MOU and Metropolitan’s Conservation Credits Program, Metropolitan assists and co-funds member agency conservation programs designed to achieve greater water use efficiency in residential, commercial, industrial, institutional and landscape uses. Direct spending by Metropolitan on active conservation incentives, including rebates for water-saving plumbing fixtures,

appliances and equipment, from fiscal year 1989-90 through fiscal year 2008-09 was \$268 million. The 2004 Integrated Water Resources Plan Update estimates that 1,100,000 acre-feet of water will be conserved annually in southern California by 2025. See "METROPOLITAN'S WATER SUPPLY—Integrated Water Resources Plan."

In August 2007, Metropolitan launched a significant public outreach campaign to urge consumers and businesses to voluntarily save water during current record dry conditions. The campaign combines radio, print and on-line advertising with media and community outreach efforts. Along with the message to save water, the campaign is intended to educate the public about the uncertainties of future water supplies. The campaign was intensified following Metropolitan's declaration of a regional Water Supply Alert on June 10, 2008 and with the February 2009 declaration of statewide water emergency by the Governor of California. Metropolitan urged cities, counties and water districts in its service area to achieve extraordinary conservation by adopting and enforcing drought ordinances, accelerating public outreach and conservation messaging, and developing additional local supplies.

Metropolitan's Board also authorized agreements with public agencies to provide financial incentives for water saving measures, ranging from \$195 to \$500 per acre-foot of potable water saved, up to a maximum of \$15 million for the Public Sector Water Efficiency Partnership Demonstration Program. This program aims to continue public support for conservation through public agency accomplishments and efforts.

The Water Surplus and Drought Management Plan ("WSDM Plan"), which was adopted by Metropolitan's Board in April 1999, evolved from Metropolitan's experiences during the droughts of 1976-77 and 1987-92. The WSDM Plan splits resource actions into two major categories: Surplus Actions and Shortage Actions. The Surplus Actions store surplus water, first inside then outside the region. The Shortage Actions of the WSDM Plan are split into three sub-categories: Shortage, Severe Shortage, and Extreme Shortage. Each category has associated actions that could be taken as a part of the response to prevailing shortage conditions. Conservation and water efficiency programs are part of Metropolitan's resource management strategy through all categories.

Metropolitan's plan for allocation of water supplies in the event of shortage (the "Water Supply Allocation Plan"; see "Water Supply Allocation Plan"; see "Water Supply Allocation Plan" below) allocates Metropolitan's water supplies among its member agencies, based on the principles contained in the WSDM Plan, to reduce water use and drawdowns from water storage reserves. Metropolitan's member agencies and retail water suppliers in Metropolitan's service area also have the ability to implement water conservation and allocation programs, and some of the retail suppliers in Metropolitan's service area have initiated conservation measures. The success of the outreach program in conjunction with the Water Supply Allocation Plan is evidenced as a contributing factor in the lower than budgeted water sales during fiscal year 2010-11. Legislation approved in November 2009 sets a statewide conservation target for urban per capita water use of 20 percent reductions by 2020 (with credits for existing conservation) at the retail level, providing an additional catalyst for conservation by member agencies and retail suppliers. (See "State Water Project—Bay-Delta Regulatory and Planning Activities" above.)

### **Water Supply Allocation Plan**

Although the WSDM Plan provides principles for imported water supply allocation, the WSDM Plan stopped short of providing a detailed allocation plan. The Water Supply Allocation Plan was approved by the Board in February 2008. The Water Supply Allocation Plan provides a formula for equitable distribution of available supplies in case of extreme water shortages within Metropolitan's service area. On April 14, 2009, Metropolitan's Board adopted a resolution declaring a regional water shortage and implementing the Water Supply Allocation Plan, effective July 1, 2009. The Board set the "Regional Shortage Level" at Water Supply Allocation Plan Level 2, which required reduction of regional water use by approximately ten percent and resulted in the sale of about 1.89 million acre-feet of Metropolitan water in fiscal year 2009-10. The final

2009-10 allocation for each member agency is dependent upon its local production during the allocation year and is currently being determined through a formal local supply certification process with the member agencies. On April 13, 2010, the Board adopted a resolution recognizing the continuing regional water shortage and again setting the Regional Shortage Level at Water Supply Allocation Plan Level 2, which sustains the prior year's regional water use reduction of approximately 10 percent and allows for the sale of about 1.96 million acre-feet of Metropolitan water in fiscal year 2010-11.

Delivery within a member agency of more than its allocated amount of Metropolitan supplies will subject the member agency to a penalty of one to four times Metropolitan's full service rate for untreated Tier 2 water, depending on how much the member agency's water use for the twelve-month period beginning on July 1 exceeds its allocated amount. (See "METROPOLITAN REVENUES—Water Rates by Water Category" in this Appendix A.) Any penalties collected may be rebated to the member agency that paid them to fund water management projects. Metropolitan's member agencies and retail water suppliers in Metropolitan's service area also may implement water conservation and allocation programs within their respective service territories.

Due to cool weather in summer 2010, impacts of the economic downturn and increased conservation, fiscal year 2010-11 sales are forecasted as of August 2010 to be below the allocated amount of 1.95 million acre-feet. The reduced demands allow for additional storage and, if current trends continue, will allow Metropolitan to store approximately 600,000 acre-feet in 2010.

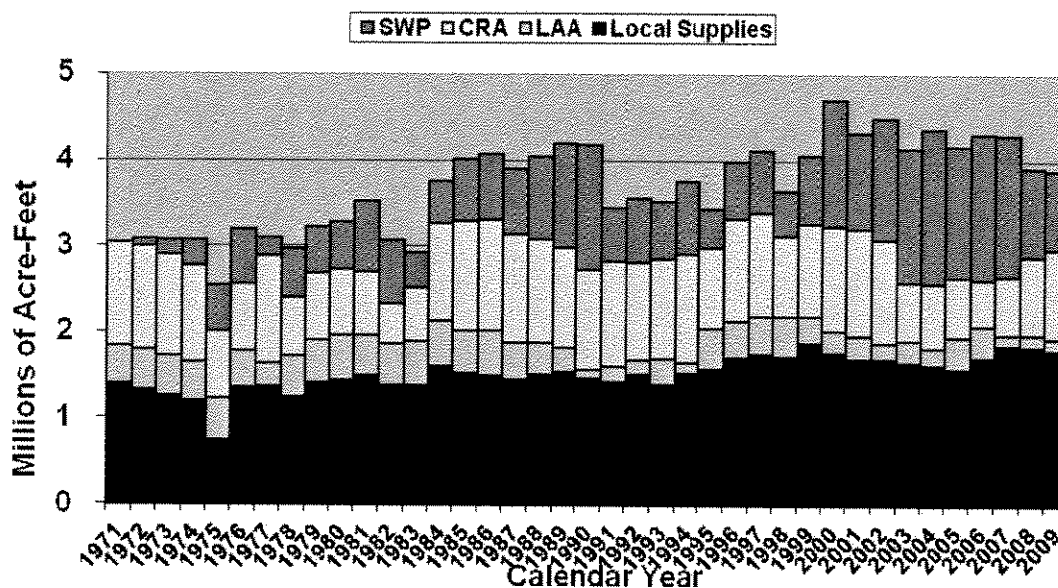
## **REGIONAL WATER RESOURCES**

The water supply for Metropolitan's service area is provided in part by Metropolitan and in part by non-Metropolitan sources available to members. Approximately two-thirds of the water supply for Metropolitan's service area is imported water received by Metropolitan from its Colorado River Aqueduct and the State Water Project and by the City of Los Angeles (the "City") from the Los Angeles Aqueduct. While the City is one of the largest water customers of Metropolitan, it receives a substantial portion of its water from the Los Angeles Aqueduct and local groundwater supply. The balance of water within the region is produced locally, primarily from groundwater supplies and runoff.

Metropolitan's member agencies are not required to purchase or use any of the water available from Metropolitan. Some agencies depend on Metropolitan to supply 100 percent of their water needs, regardless of the weather. Other agencies, with local surface reservoirs or aqueducts that capture rain or snowfall, rely on Metropolitan more in dry years than in years with heavy rainfall, while others, with ample groundwater supplies, purchase Metropolitan water only to supplement local supplies or to recharge groundwater basins. Climatic conditions in Metropolitan's service area and availability of local supplies affect demands for imported water purchased from Metropolitan. For information on Metropolitan's revenues, see "METROPOLITAN REVENUES" and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES" in this Appendix A.

The following graph shows a summary of the regional sources of water supply for the years 1971 to 2009. Local supplies available within Metropolitan's service area are augmented by water imported by the City through the Los Angeles Aqueduct and Metropolitan supplies provided through the Colorado River Aqueduct and State Water Project.

### Sources of Water Supply in the Metropolitan Service Area (1971-2009)



Source: Metropolitan.

The major sources of water for Metropolitan's member agencies in addition to supplies provided by Metropolitan are described below.

#### Los Angeles Aqueduct

The City, through its Department of Water and Power, operates its Los Angeles Aqueduct system to import water from the Owens Valley and the Mono Basin on the eastern slopes of the Sierra Nevada Mountains in eastern California. Prior to the Mono Lake Basin Water Right Decision 1631 (Decision 1631) issued in September 1994, which revised the Department of Water and Power's water rights license in the Mono Basin, the City had imported an average of 460,000 acre-feet of water annually from the combined Owens Valley/Mono Basin system, of which about 85,000 acre-feet came from the Mono Basin. Under Decision 1631, the City has exported less than 16,000 acre-feet annually from the Mono Basin in recent years.

Pursuant to the City's turnout agreement with DWR, Antelope Valley-East Kern Water Agency ("AVEK") and Metropolitan, the Department of Water and Power commenced construction in 2010 of the turnout facilities along the California Aqueduct within AVEK's service area. Upon completion, the turnout will enable AVEK to deliver water from the California Aqueduct to the Los Angeles Aqueduct. Conditions precedent to such delivery of water include obtaining agreements for the transfer of non-State Water Project water directly from farmers and water districts in Northern and Central California, available capacity in the California Aqueduct and compliance with State Water Project water quality requirements. The agreement limits use of the turnout to delivery of non-State Water Project water annually to the City in amounts not to exceed the supplies lost to the City as a result of its Eastern Sierra environmental obligations, including water for the Lower Owens River Project and Owens Lake Dust Mitigation Project, which used about 98,000 acre-feet of Los Angeles Aqueduct water from April 2009 to March 2010. Construction of the turnout began in 2010.

Historically, the Los Angeles Aqueduct and local groundwater supplies have been nearly sufficient to meet the City's water requirements during normal water supply years. As a result, as recently as the late 1980's only about 15 percent of the City's water needs (approximately 100,000 acre-feet) were supplied by Metropolitan. From fiscal year 2000-01 to fiscal year 2009-10, approximately 30 to 71 percent of the City's total water requirements were met by Metropolitan. For the five fiscal years ended June 30, 2010, the City's water deliveries from Metropolitan averaged approximately 325,000 acre-feet per year, which constituted approximately 52 percent of the City's total water supply. Deliveries from Metropolitan to the City during this period varied between approximately 209,000 acre-feet per year and approximately 436,000 acre-feet per year. See "METROPOLITAN REVENUES—Principal Customers" in this Appendix A. According to the Los Angeles Department of Water and Power's Year 2005 Urban Water Management Plan, the City is planning to purchase approximately 40 percent of its normal year supplies and up to approximately 60 percent of its dry year supplies from Metropolitan over the next 25 years. This corresponds to an increase from normal to dry years of approximately 134,000 acre-feet in potential demand for supplies from Metropolitan. The City is also currently updating its Year 2010 Urban Water Management Plan and expects completion by mid 2011.

The Los Angeles Department of Water and Power has indicated that it is currently analyzing additional impacts to the Los Angeles Aqueduct's water supply deliveries of various environmental projects aimed at improving air quality and fish and riparian habitat in the Owens Valley. The City's future reliance on Metropolitan supplies may increase with implementation of will be dependent on these projects and the amount of water, if any, that may be derived from sources other than Metropolitan.

### **Local Water Supplies**

Local water resources include groundwater production, recycled water production and diversion of surface flows.

*Groundwater.* Demands for about 1.5 million acre-feet per year, about one-third of the annual water demands for almost 19 million residents of Metropolitan's service area, are met from groundwater production. Local groundwater supplies are supported by recycled water, which is blended with imported water and recharged into groundwater basins, and also used for creating seawater barriers that protect coastal aquifers from seawater intrusion.

*Groundwater Storage Programs.* Metropolitan has partnered with a number of agencies to develop groundwater storage projects in its service area. These projects are designed to help meet the water delivery reliability goals of storing surplus imported supplies when available so that local agencies can withdraw stored groundwater during droughts or other periods of water supply shortage. Metropolitan was allocated \$45 million in State Proposition 13 bond proceeds to develop groundwater storage projects in Metropolitan's service area. The nine projects in this program, under agreements with Long Beach, Chino Basin, Orange County Basin, Three Valleys Municipal Water District/City of La Verne, Foothill Municipal Water District, Compton and Western Municipal Water District/Elsinore Valley Municipal Water District, provide over 210,000 acre-feet of groundwater storage. The groundwater storage program with Calleguas Municipal Water District in the North Las Posas Groundwater Basin in Ventura County has storage capacity of 210,000 acre-feet. These ten programs have a combined extraction capacity of over 115,000 acre-feet per year. Metropolitan began calling for extraction from these storage accounts in 2007. During fiscal year 2008-2009, over 75,000 acre-feet of stored water was produced and sold from these storage accounts. Fiscal year 2009-10 sales from the ten accounts totaled nearly 59,000 acre-feet, leaving a balance of approximately 57,000 acre-feet in the storage accounts. During fiscal year 2010-11, Metropolitan began to store water in some of these accounts. As of September 1, 2010, the balance in the ten accounts was approximately 62,000 acre-feet. See table "Metropolitan's Water Storage Capacity and Water in Storage" under "METROPOLITAN'S WATER SUPPLY—Storage Capacity and Water in Storage" in this Appendix A.

*Recovered Groundwater.* Contamination of groundwater supplies is a growing threat to local groundwater production. Metropolitan has been supporting increased groundwater production and improved regional supply reliability by offering financial incentives to agencies for production and treatment of degraded groundwater since 1991. Metropolitan has executed agreements with local agencies to provide financial incentives to 23 projects that recover contaminated groundwater with total contract yields of about 84,000 acre-feet per year. During fiscal year 2008-09 Metropolitan provided incentives for approximately 47,000 acre-feet of recovered water under these agreements. Total groundwater recovery use under executed agreements is expected to grow to 69,000 acre-feet by 2015.

*Surface Runoff.* Local agencies divert about 117,000 acre-feet per year of water from flows in local streams. Local surface water supplies are heavily influenced by year to year local weather conditions, varying from a high of 192,000 acre-feet in fiscal year 1998-99 to a low of 52,000 acre-feet in fiscal year 2003-04.

*Conjunctive Use.* Conjunctive use is accomplished when groundwater basins are used to store imported supplies during water abundant periods. The stored water is used during shortages and emergencies with a corresponding reduction in surface deliveries to the participating agencies. Regional benefits include enhancing Metropolitan's ability to capture excess surface flows during wet years from both the State Water Project and Colorado River. Groundwater storage is accomplished using spreading basins, injection wells, and in-lieu deliveries where imported water is substituted for groundwater, and the groundwater not pumped is considered stored water.

Metropolitan promotes conjunctive use at the local agency level under its Replenishment Water Program by discounting rates for imported water placed into groundwater or reservoir storage during wet months. The discounted rate and program rules encourage construction of additional groundwater production facilities allowing local agencies to be more self-sufficient during shortages. (See "*Groundwater Storage Programs*" above.) In calendar year 2006, Metropolitan delivered approximately 228,000 acre-feet of water as replenishment water. In calendar year 2007, Metropolitan delivered approximately 52,000 acre-feet of water as replenishment up to May 1, then discontinued storage deliveries. During fiscal year 2009-10, some member agencies began to request full service deliveries for groundwater recharge to support continued groundwater production.

*Recycled Water.* Metropolitan has supported recycled water use to offset potable water demands and improve regional supply reliability by offering financial incentives to agencies for production and sales of recycled water since 1991. Metropolitan has executed agreements with local agencies to provide financial incentives to 61 recycled water projects with total contract yields of about 332,000 acre-feet per year. During fiscal year 2008-09, Metropolitan provided incentives for approximately 153,000 acre-feet of reclaimed water under these agreements. Total recycled water use under executed agreements is expected to grow to about 246,000 acre-feet by 2015.

*Seawater Desalination.* Metropolitan authorized an agreement with SDCWA and nine of its local retail agencies on November 10, 2009, to provide financial incentives for desalinated ocean water produced by the Carlsbad Project. ~~However, SDCWA has not executed the proposed agreement and on~~ On July 22, 2010, the SDCWA board of directors approved terms and conditions of an alternative agreement to purchase water from the Carlsbad Project. Neither SDCWA nor Metropolitan has executed the incentive agreement authorized by Metropolitan, as a result of the change in structure of the agreement and litigation initiated by SDCWA challenging Metropolitan's rate structure that, under the agreement's terms, could trigger proceedings for termination of the agreement. See "METROPOLITAN'S WATER SUPPLY—The Preferred Resource Mix—Seawater Desalination" and "METROPOLITAN REVENUES—Rate Structure—Delta Supply Surcharge" in this Appendix A. The Carlsbad Project, to be constructed and operated by Poseidon Resources LLC, is projected to produce up to 56,000 acre-feet of desalinated seawater annually. Metropolitan has signed agreements with three other member agencies (Long Beach, West Basin Municipal Water District and the Municipal Water District of Orange County) to provide incentives of up to \$250 per acre-foot for desalinated

seawater delivered by proposed seawater desalination projects, subject to review of complete project descriptions and consideration of environmental documentation by Metropolitan's Board. Feasibility and design studies for these projects are under way. These projects could produce up to 46,000 acre-feet per year.

In addition to the projects in Metropolitan's incentive program, three other seawater desalination projects are under consideration in Metropolitan's service area. Poseidon Resources is developing a 56,000 acre-feet per year project in Huntington Beach which is currently in the permitting phase. The SDCWA is studying the potential for a 150,000 acre-feet per year seawater desalination project in Camp Pendleton, and is also leading a feasibility study of a 56,000 acre-feet per year project in Rosarito Beach in Mexico. If developed, SDCWA and potentially Metropolitan could receive a portion of the Rosarito Beach desalinated supplies either through delivery to SDCWA or through Colorado River supply exchanges with Mexico.

## **METROPOLITAN'S WATER DELIVERY SYSTEM**

### **Method of Delivery**

Metropolitan's water delivery system is made up of three basic components: the Colorado River Aqueduct, the California Aqueduct of the State Water Project and Metropolitan's internal water distribution system. Metropolitan's delivery system is integrated and designed to meet the differing needs of its member agencies. Metropolitan seeks redundancy in its delivery system to assure reliability in the event of an outage. Current system expansion and other improvements will be designed to increase the flexibility of the system. Since local sources of water are generally used to their maximum each year, growth in the demand for water is partially met by Metropolitan. Accordingly, the operation of Metropolitan's water system is being made more reliable through the construction of additional storage reservoirs, rehabilitation of key facilities as needed, additional pipelines, improved preventive maintenance programs and the upgrading of Metropolitan's operational control systems. See "CAPITAL INVESTMENT PLAN" in this Appendix A.

*Colorado River Aqueduct.* Work on the Colorado River Aqueduct commenced in 1933 and water deliveries started in 1941. Additional facilities were completed by 1961 to meet additional requirements of Metropolitan's member agencies. The Colorado River Aqueduct is 242 miles long, starting at the Lake Havasu intake and ending at the Lake Mathews terminal reservoir. Metropolitan owns all of the components of the Colorado River Aqueduct, which include five pump plants, 64 miles of canal, 92 miles of tunnels, 55 miles of concrete conduits and 144 underground siphons totaling 29 miles in length. The pumping plants lift the water approximately 1,617 feet over several mountain ranges to Metropolitan's service area. See "METROPOLITAN'S WATER SUPPLY—Colorado River Aqueduct" in this Appendix A.

*State Water Project.* The initial portions of the State Water Project serving Metropolitan were completed in 1973. State Water Project facilities are owned and operated by DWR. Twenty-nine agencies have entered into contracts with DWR to receive water from the State Water Project. See "METROPOLITAN'S WATER SUPPLY—State Water Project" in this Appendix A.

*Internal Distribution System.* Metropolitan's internal water distribution system includes components that were built beginning in the 1930's and through the present. Metropolitan owns all of these components, including 14 dams and reservoirs, five regional treatment plants, over 800 miles of transmission pipelines, feeders and canals, and 16 hydroelectric plants with an aggregate capacity of 131 megawatts.

*Diamond Valley Lake.* Diamond Valley Lake, a man-made reservoir located southwest of the city of Hemet, California, covers approximately 4,410 acres and has capacity to hold approximately 810,000 acre-feet or 265 billion gallons of water. The Diamond Valley Lake was constructed to serve approximately 90 percent of Metropolitan's service area by gravity flow. Associated hydraulic structures consist of an inlet-outlet tower, pumps and generating facilities, a pressure control facility, connecting tunnels and a forebay. Imported water is delivered to Diamond Valley Lake during surplus periods. The reservoir provides more reliable delivery of



Metropolitan began accounting for and reporting its OPEB obligations beginning with its financial statements for the fiscal year ended June 30, 2006.

~~For fiscal year 2009-10,~~ Metropolitan's annual actuarially required OPEB contributions were ~~\$32.4~~\$34.1 million in ~~fiscal year 2009-10~~ and are projected to be \$37.2 million in ~~fiscal year 2010-11~~. Pay-as-you-go contributions were \$9.8 million in fiscal year 2009-10 and are projected to be \$12.3 million in fiscal year 2010-11, which represent ~~30.2~~33 percent and 33 percent respectively of the annual required contributions. The required contributions were based on a January 1, 2009 actuarial valuation using the entry-age normal actuarial cost method with contributions determined as a level percent of pay. The actuarial assumptions included (a) a 5.0 percent investment rate of return, (b) a general inflation component of 3.0 percent and (c) increases to basic medical premiums of 8.4 percent for Kaiser, 9.4 percent for Blue Shield and 10.0 percent for Preferred Provider Organization plans per year for 2011 grading down to 4.5 percent for 2017 thereafter. As of January 1, 2009, the date of the actuarial report, the unfunded OPEB liability was estimated to be ~~\$41.6~~\$40.4 million. The June 30, 2007 unfunded actuarial accrued liability is amortized over a fixed 30-year period starting with fiscal year 2007-08. Assumption changes are amortized over a fixed 20-year period starting with fiscal year 2009-10. Actuarial gains and losses are amortized over a rolling 15-year period. Metropolitan intends to continue funding on a pay-as-you-go-basis while it reviews various funding options.

In July 1998, in a case entitled *Dewayne Cargill et al. v. Metropolitan Water District of Southern California et al.* a class action was brought by various categories of temporary workers against Metropolitan and certain temporary agencies, claiming that Metropolitan misclassified them as temporary workers to avoid providing them the same rights and benefits given to regular employees and seek the full benefits of public employment, including membership in PERS on a retroactive basis. See "GOVERNANCE AND MANAGEMENT—Employee Relations" above for further information on the case and the court-approved settlement of these claims.

## **HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES**

The following table provides a summary of revenues and expenditures of Metropolitan prepared to conform to the Revenue Bond Resolutions provisions regarding rates and additional Bonds (as defined in the Master Resolution) and Parity Obligations (as defined in the Master Resolution). See "METROPOLITAN EXPENDITURES—Limitations on Additional Revenue Bonds." The table is presented on a cash basis, and does not reflect the accrual basis used to prepare Metropolitan's annual audited financial statements. The projections are based on assumptions concerning future events and circumstances that may impact revenues and expenditures and represent management's best estimates of results at this time. See footnotes to the table below entitled ~~"HISTORICAL AND PROJECTED REVENUES AND EXPENSES"~~ and ~~"MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENSES"~~ and ~~"HISTORICAL AND PROJECTED REVENUES AND EXPENSES"~~ and ~~"MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES"~~ for relevant assumptions, including projected water sales and average annual increase in the effective water rate, and "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES" for a discussion of potential impacts. Some assumptions inevitably will not materialize and unanticipated events and circumstances may occur. Therefore, the actual results achieved during the projection period will vary from the projections and the variations may be material.

In addition to the Parity Bonds currently outstanding and the Bonds described in the Official Statement, Metropolitan anticipates issuing approximately \$1.195 billion aggregate principal amount of Parity Bonds through fiscal year 2014-15 to finance the CIP. The debt service coverage ratio is projected to decline as a result of the issuance of additional Parity Bonds to finance Metropolitan's CIP and increased operating costs. However, in September 2004 Metropolitan adopted a goal to maintain a minimum fixed charge coverage ratio, measuring total coverage of all fixed obligations (which includes all revenue bond debt service obligations, State Water Contract capital payments paid from current year operations and subordinate obligations) after



payment of operating expenditures, of 1.2 times. This goal is subject to change by future action of Metropolitan's Board.

Estimated revenues and expenditures are based on assumptions and estimates used in developing the adopted budget and revenue requirements for fiscal years 2010-11 and 2011-12, with adjustments to projected water sales receipts for 2010-11 in accordance with the revised projection for water sales. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES—Water Sales Receipts." The projections assume that water sales will be ~~1,771.8~~ million acre-feet in fiscal year 2010-11, ~~2,002.0~~ million acre-feet in fiscal year 2011-12, ~~2,032.0~~ million acre-feet in fiscal year 2012-13, ~~2,102.1~~ million acre-feet for fiscal year 2013-14 and ~~2,112.1~~ million acre-feet in 2014-15 and that water rates and charges will increase by 7.5 percent, effective January 1, 2011 and 7.5 percent, effective January 1, 2012. Thereafter, rates and charges are projected to meet costs and to rise annually at rates between one and two percent above the annual rate of inflation (projected at 3.5 percent per year). Actual rates and charges to be effective in 2013 and thereafter are subject to adoption by Metropolitan's Board. The projections were prepared by Metropolitan and have not been reviewed by independent certified public accountants or any entity other than Metropolitan. Dollar amounts are rounded.

**HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES**  
**(Dollars in Millions)**  
**(Unaudited Cash Basis)**

	<u>Actual</u>				<u>Projected</u>				
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
Receipts from Water Sales <sup>(a)</sup>	\$ 892	\$968	\$988	\$1,011	\$1,095	\$1,338	\$1,439	\$1,570	\$1,655
Additional Revenue Sources <sup>(b)</sup>	<u>113</u>	<u>114</u>	<u>120</u>	<u>135</u>	<u>155</u>	<u>171</u>	<u>187</u>	<u>198</u>	<u>208</u>
Total Operating Revenues	<u>1,005</u>	<u>1,082</u>	<u>1,108</u>	<u>1,146</u>	<u>1,250</u>	<u>1,509</u>	<u>1,626</u>	<u>1,768</u>	<u>1,863</u>
O&M, CRA Power and Water Transfer Costs <sup>(c)</sup>	(392)	(470)	(532)	(551)	(547)	(622)	(687)	(746)	(789)
Total SWC OMP&R and Power Costs <sup>(d)</sup>	<u>(256)</u>	<u>(321)</u>	<u>(251)</u>	<u>(274)</u>	<u>(323)</u>	<u>(337)</u>	<u>(351)</u>	<u>(366)</u>	<u>(410)</u>
Total Operation and Maintenance	<u>(648)</u>	<u>(792)</u>	<u>(782)</u>	<u>(825)</u>	<u>(870)</u>	<u>(959)</u>	<u>(1,038)</u>	<u>(1,112)</u>	<u>(1,199)</u>
Net Operating Revenues	\$ 357	\$ 290	\$ 326	\$ 321	\$ 380	\$ 550	\$ 588	\$656	\$664
Miscellaneous Revenue <sup>(e)</sup>	6	7	20	33	13	23	24	25	25
Sales of Hydroelectric Power <sup>(f)</sup>	45	41	23	19	23	22	22	23	23
Interest on Investments <sup>(g)</sup>	<u>33</u>	<u>46</u>	<u>32</u>	<u>19</u>	<u>32</u>	<u>33</u>	<u>37</u>	<u>39</u>	<u>41</u>
Adjusted Net Operating Revenues <sup>(h)</sup>	441	385	401	392	448	628	671	743	753
Bonds and Additional Bonds Debt Service <sup>(i)</sup>	(200)	(219)	(223)	(244)	(275)	(313)	(329)	(346)	(363)
Subordinate Revenue Obligations <sup>(j)</sup>	<u>(1)</u>	<u>(1)</u>	<u>(1)</u>	<u>(1)</u>	<u>(1)</u>	<u>(1)</u>	<u>(1)</u>	<u>(1)</u>	<u>(1)</u>
Funds Available from Operations	\$ 240	\$ 165	\$ 177	\$ 147	\$ 172	\$ 314	\$ 341	\$ 396	\$ 389
Bonds and Additional Bonds Debt Service Coverage <sup>(k)</sup>	2.21	1.76	1.80	1.61	1.63	2.01	2.04	2.15	2.07
Debt Service Coverage on all Obligations <sup>(l)</sup>	2.19	1.75	1.79	1.60	1.62	2.00	2.03	2.14	2.07
Funds Available from Operations	\$ 240	\$ 165	\$ 177	\$ 147	\$ 172	\$ 314	\$ 341	\$396	\$ 389
Other Receipts (Expenditures)	(26)	(19)	(8)	(5)	(2)	(6)	(6)	(6)	(6)
Pay-As-You Go Construction	(95)	(34)	(31)	(35)	(45)	(125)	(125)	(125)	(125)
Water Transfer Capital Costs	(13)	(48)	(8)	(12)	-0-	-0-	-0-	-0-	-0-
Total SWC Capital Costs Paid from Current Year Operations	<u>(60)</u>	<u>(90)</u>	<u>(86)</u>	<u>(115)</u>	<u>(116)</u>	<u>(137)</u>	<u>(160)</u>	<u>(173)</u>	<u>(196)</u>
Remaining Funds Available from Operations	46	(28)	44	(20)	9	46	50	92	62
Tax Receipts	101	101	105	97	82	82	83	82	62
General Obligation Bonds Debt Service	(49)	(49)	(49)	(48)	(39)	(39)	(41)	(41)	(24)
SWC Capital Costs Paid from Taxes	<u>(52)</u>	<u>(52)</u>	<u>(56)</u>	<u>(49)</u>	<u>(43)</u>	<u>(43)</u>	<u>(42)</u>	<u>(41)</u>	<u>(38)</u>
Net Funds Available from Current Year	\$46	\$ (28)	\$ 44	\$ (20)	\$9	\$46	\$50	\$92	\$ 62
Pay-As-You Go Construction-Prior Year Reserves	\$(14)	--	--	--	--	--	--	--	--

Source: Metropolitan. (Footnotes on next page)

- (a) During the four fiscal years, June 30, 2007 through June 30, 2010, annual water sales (in acre-feet) were 2.25 million, 2.31 million, 2.17 million and 1.86 million respectively. See table entitled "SUMMARY OF WATER SOLD AND WATER SALES RECEIPTS" above. The water receipts projections are based upon estimated annual water sales (in acre-feet) of 4,771.8 million for 2010-11, 2,002.0 million for 2011-12, 2,032.0 million for 2012-13, 2,402.1 million for 2013-14 and 2,442.1 million for 2014-15. Projections assume Board adopted rate and charge increases of 7.5 percent, effective January 1, 2011 and 7.5 percent, effective January 1, 2012. Thereafter, rates and charges are projected to recover cost and are estimated to require increases of approximately 5 percent per year, subject to adoption by Metropolitan's Board. See "MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES" below.
- (b) Includes receipts from water standby, readiness-to-serve and capacity reservation charges. The term Operating Revenues excludes ad valorem taxes. See "METROPOLITAN REVENUES — Additional Revenue Components."
- (c) Water Transfer Costs are included in Operation and Maintenance Expenditures for purposes of calculating the debt service coverage on all Obligations. Increase in 2009 reflects increased purchases of water transfer supplies.
- (d) Includes on and off aqueduct power and operation, maintenance, power and replacement costs payable under the State Water Contract.
- (e) Includes lease and rental net proceeds, net proceeds from sale of surplus property and federal interest subsidy payments for Build America Bonds of \$2.3 million in fiscal year 2009-10 and \$5.4 million annually in fiscal years 2010-11 through 2013-14.
- (f) Includes Colorado River Aqueduct power sales.
- (g) Does not include interest applicable to Bond Construction Funds, the Excess Earnings Funds, other trust funds and the Deferred Compensation Trust Fund.
- (h) Adjusted Net Operating Revenues is a sum of all available revenues that the revenue bond resolutions specify may be considered by Metropolitan in setting rates and issuing additional Bonds and Parity Obligations.
- (i) Net of investment income with respect to reserve funds. Assumes the issuance of additional Bonds and Parity Obligations as follows: \$400 million in 2010-11, \$0- million in 2011-12, \$220 million in 2012-13, \$340 million in 2013-14 and \$235 million in 2014-15. See "OPERATING REVENUES, DEBT SERVICE AND INVESTMENT PORTFOLIO—Anticipated Financings" in the Official Statement.
- (j) Represents California Safe Drinking Water Revolving Fund Loan debt service. See "METROPOLITAN EXPENDITURES—Subordinate Revenue Obligations" above.
- (k) Represents adjusted Net Operating Revenues divided by the outstanding Bonds and additional Bonds Debt Service.
- (l) Adjusted Net Operating Revenues, divided by outstanding Revenue Bond Debt Service, additional Bonds Debt Service and non-revenue bond commercial paper and California Safe Drinking Water Revolving Fund Loan debt service, using exact, rather than rounded dollar amounts. Assumes that no Commercial Paper Notes are issued. See "Subordinate Revenue Obligations" above.

## MANAGEMENT'S DISCUSSION OF HISTORICAL AND PROJECTED REVENUES AND EXPENDITURES

### Water Sales Receipts

Metropolitan relies on receipts from water sales for about 75 to 80 percent of its total revenues. Metropolitan's Board has adopted annual increases in water rates each year beginning with the rates effective January 1, 2004. See "METROPOLITAN REVENUES—Rate Structure" and "—Classes of Water Service" in this Appendix A. Effective January 1, 2009, base water rates and charges increased by 9.8 percent plus a \$25 per acre-foot water supply surcharge. The combined impact was an increase of approximately 14.3 percent. Water rates and charges increased an average of 19.7 percent effective September 1, 2009, and the water supply surcharge was replaced by a \$69 per acre-foot Delta Supply Surcharge intended to recover the costs of additional water transfer purchases to augment State Water Project supplies and to be reduced as interim Delta improvements ease pumping restrictions, resulting in lower costs for additional supplies. See "METROPOLITAN'S WATER SUPPLY—State Water Project" and "—Water Transfer, Storage and Exchange Programs" in this Appendix A. On April 14, 2009, Metropolitan's Board directed staff to evaluate historical cost-of-service methodology with the intent to ensure that all rates and charges recover the full cost of service effective January 1, 2011. On April 13, 2010, Metropolitan's Board adopted a Delta Supply Surcharge of \$51 and \$58 per acre-foot, effective January 1, 2011 and January 1, 2012, respectively, with corresponding base water rate increases of 7.5 percent. Increases in rates and charges reflect increasing operations and maintenance costs, including higher treatment costs, financing requirements of the approximately \$1.87 billion five-year CIP (covering the years 2010 to 2014), increasing State Water Project costs, rising demand management costs and water supply purchases, as well as reduced water sales.

Metropolitan's projections assume that water sales will be 4,771.8 million acre-feet in fiscal year 2010-11, which is 160,000 acre-feet lower than budget. The lower sales reflect the impact of a number of factors, including an unusually cool summer, greater supplies from the Los Angeles Aqueduct system, the impacts of a sluggish economy, higher retail water rates and the results of Metropolitan's effective water conservation outreach associated with the imposition of Metropolitan's Water Supply Allocation Plan. Sales forecasts beyond fiscal year 2010-11 are: 2,002.0 million acre-feet in fiscal year 2011-12, 2,032.0 million

acre-feet in fiscal year 2012-13, ~~2-102.1~~ million acre-feet in fiscal year 2013-14, and ~~2-112.1~~ million acre-feet in fiscal year 2014-15, reflecting a return to average weather conditions, a recovering economy and population growth, notwithstanding impacts of conservation and projected increases in water rates. For purposes of comparison, Metropolitan's water sales were approximately 2.17 million acre-feet during as recently as fiscal year 2008-09, before Metropolitan implemented its Water Supply Allocation Plan on July 1, 2009. These projections reflect the Board's actions to increase water rates and charges by 7.5 percent, effective January 1, 2011 and 7.5 percent, effective January 1, 2012. Thereafter, rates and charges are projected to increase to recover costs. Actual rates and charges to be effective in 2013 and thereafter are subject to adoption by Metropolitan's Board and are estimated to require increases of approximately five percent per year.

Metropolitan has funded a Water Rate Stabilization Fund and a Water Treatment Surcharge Stabilization Fund with a portion of the water revenues collected. The Board's stated policy is to use moneys in these funds to mitigate the need to increase water rates as a result of hydrologic variation. Water Rate Stabilization and Revenue Remainder funds increased by \$35.7 million in fiscal year 2008-09 and decreased by \$29.0 million in fiscal year 2009-10. The Long-Range Finance Plan adopted by the Board on March 9, 1999 provides for a minimum/maximum reserve policy based on Metropolitan's water sales during wet periods. Funds representing the minimum reserve level are held in the Water Revenue Remainder Fund, and any funds in excess of the minimum reserve level (up to the maximum reserve level) are held in the Water Rate Stabilization Fund. The maximum reserve level on June 30, 2010 was calculated to be \$542 million and fund balances in the Water Rate Stabilization Fund and the Water Revenue Remainder Fund at that date totaled \$297 million. The minimum reserve requirement as of June 30, 2010, was \$218 million. Given the lower than budgeted sales volumes, it is estimated that \$34 million to \$100 million will be drawn from these funds during 2010-11, depending on actual water sales, the level of pay-as-you-go funding for the CIP and other factors. See "METROPOLITAN REVENUES—Financial Reserve Policy" and "CAPITAL INVESTMENT PLAN—Capital Investment Plan Financing" in this Appendix A.

### **Operation and Maintenance Expenditures**

Operation and Maintenance Expenditures in fiscal year 2009-10 were \$825 million, which represented approximately 65 percent of total costs. These expenditures include the costs of labor, electrical power, materials and supplies of both Metropolitan and its contractual share of the State Water Project. The cost of power for pumping water through the aqueducts is a major component of this category of expenditures.

A major component of the increase in fiscal year 2009-10 operations and maintenance expenditures was due to higher purchases for water transfers and increased operation and maintenance costs associated with Metropolitan's increasing participation in water conservation, reclamation and groundwater cleanup. The 2010-11 estimated operation and maintenance expenditures of \$780 million include an increase in State Water Project energy costs associated with moving increased amounts of water on the project in fiscal year 2010-11. Metropolitan's Board adopted a budget benchmark in September 2004 to limit the annual increase in departmental operations and maintenance budgets to no more than the five-year rolling average change in the Los Angeles/Orange/Riverside Counties consumer price index. The fiscal year 2010-11 departmental budget of \$337 million is approximately equal to fiscal year 2009-10 departmental expenditures.

## **POWER SOURCES AND COSTS**

### **General**

Current and future costs for electric power required for operating the pumping systems of the Colorado River Aqueduct and the State Water Project are a substantial part of Metropolitan's overall expenses. Expenditures for electric power for the Colorado River Aqueduct (not including credits from power sales and related revenues) for the fiscal years ended June 30, 2008, June 30, 2009 and June 30, 2010 were approximately \$19 million, \$37.4 million and \$42.4 million, respectively.