THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

BOARD ACTION

- **Board of Directors**
  Finance and Insurance Committee

4/8/2014 Board Meeting

8-1

Subject

Approve proposed biennial budget for fiscal years 2014/15 and 2015/16, proposed ten-year forecast, proposed revenue requirements for fiscal years 2014/15 and 2015/16, and recommended water rates and charges to be effective on January 1, 2015 and January 1, 2016; adopt resolutions fixing and adopting water rates and charges for 2015 and 2016; and transmit the General Manager's Business Plan Strategic Priorities for FY 2014/15 and FY 2015/16

Executive Summary

This letter recommends approval of the biennial budget for fiscal year (FY) 2014/15 and FY 2015/16 and the associated ten-year forecast, and the revenue requirements for FY 2014/15 and FY 2015/16, and the recommended water rates and charges to be effective on January 1, 2015 and January 1, 2016; and adoption of (1) the resolution fixing and adopting water rates to be effective on January 1, 2015 and January 1, 2016; (2) the resolution to fix and adopt the Readiness-to-Serve Charge effective January 1, 2015; and (3) the resolution to fix and adopt the Capacity Charge effective January 1, 2015. This letter recommends specific uses of projected reserves over the maximum reserve target on June 30, 2014 to reduce future obligations.

The Board, Finance and Insurance (F&I) Committee, and member agencies have been reviewing and evaluating Metropolitan's biennial budget and revenue requirements and the rates necessary to support the revenue requirements. The ten-year forecast of costs, fixed charges, revenue requirements and rates was also presented and implications of near-term actions on long-term revenue requirements were discussed. The proposed budget, revenue requirements and recommended rates were provided to the Board on January 30, 2014, and presented on February 10, 2014. Board workshops were held on February 10, 2014 at the F&I Committee meeting, on February 25, 2014 and on March 10, 2014 at the F&I Committee, and these included extended budget, revenue requirements and rates discussions. The F&I Committee meeting on April 7, 2014 will provide an opportunity for more review and discussion.

The General Manager's Business Plan Strategic Priorities for the biennial budget period are provided in **Attachment 1**–General Manager's Business Plan Strategic Priorities for FY 2014/15 and FY 2015/16, and will be discussed at the Executive Committee meeting in April 2014.

PUBLIC HEARING: Proposed Rates and Charges

A public hearing on proposed rates and charges was held on March 11, 2014, where members of the public addressed the Board and provided comments. Eleven speakers provided oral comments to the Board. In addition, sixteen letters have been received on the proposed rates and charges and made part of the record. A list of all member agencies, subagencies and members of the public that provided comments in response to the proposed rates and charges is included in **Attachment 2** – Public Hearing Comments. All materials received at the public hearing have been reviewed by staff and are available for review in the office of the Chief Financial Officer and on the Directors' and Metropolitan'swebsites.

PUBLIC HEARING: Suspending the Tax Rate Restriction in Section 124.5 of the Metropolitan Water District (MWD) Act

A public hearing on the proposal to suspend the tax rate restriction in Section 124.5 of the MWD Act was held on March 11, 2014, where members of the public addressed the Board and provided comments. Six speakers provided oral comments to the Board. Two letters were received on the proposal to suspend the tax rate restriction; some of the written comments on proposed rates and charges also commented on this proposal. A list of all member agencies, subagencies and members of the public that provided comments in response to the suspension of the tax rate restriction is included in **Attachment 2** – Public Hearing Comments.

Details

BIENNIAL BUDGET AND RATES AND CHARGES OPTIONS

Based on the Board discussions over the past two months, three options are presented for the Board's consideration as described below. All options substantially meet the Board's financial policies by providing anticipated revenues that meet the anticipated cost of service, as shown in the biennial budget proposal and cost of service reports, meet the fixed charge coverage target, provide increased funding from revenues for the Capital Investment Plan (CIP), and promote long-term fiscal sustainability goals as reflected in the proposed ten-year forecast. The options also allocate costs so that payers bear their fair and reasonable share.

Assumed in the three options is a biennial budget and revenue requirement based on normal conditions. While the state is currently experiencing drought conditions and the SWP allocation for calendar year 2014 is zero percent, Metropolitan is prepared to meet these difficult conditions. Metropolitan delivers a reliable water supply to the region throughout a variety of hydrologic conditions. Metropolitan has a diverse water supply portfolio and has made long-term investments in storage programs, conservation, local resource development, and drought response to help meet customer demands if the next several years are dry. Historically, Metropolitan's water sales have varied widely during dry periods. Therefore, it is reasonable for Metropolitan to base the proposed biennial budget and revenue requirement on a conservative sales estimate of 1.75 million acre-feet (MAF), State Water Project (SWP) deliveries of 955 thousand acre-feet (TAF), and Colorado River deliveries of 880 TAF for each of FY 2014/15 and FY 2015/16. Although the SWP allocation is currently set at zeropercent, the allocation is subject to change, Metropolitan anticipates moving stored water through the SWP, and there is a potential for water purchases, transfers or exchanges using the SWP facilities. Variations in revenues and costs due to hydrology will be managed by use of financial reserves established for this purpose, including the use of Water Management designated funds discussed below. **Attachment 3** – Biennial FY 2014/15 and 2015/16 Budget Summaryprovides an overview of the biennial budget.

Also, each of the three options assumes the Board maintains the ad valorem tax rate at its current level when the rate is set in August of this year. The current ad valorem tax rate is estimated to generate $182 million over the next two fiscal years, providing $115 million to pay for general obligation and State Water Contract (SWC) Burns-Porter bond debt service and $67 million to offset other SWC costs. In addition, maintaining the ad valorem tax rate helps to maintain a balance between fixed and variable revenues and mitigate the need for future water rate increases. If the ad valorem tax rate restriction is not suspended when the Board sets the tax rate in August, the revenue shortfall for the proposed biennial budget will be made up from the Replacement & Refurbishment (R&R) Fund, and projected rate increases in FY 2016/17 and 2017/18 will be 2 percenthigher.

Finally, all three options provide for allocation of an estimated $350 million in water rate stabilization reserves over the reserve target on June 30, 2014 to reduce future obligations, keep future rate increases reasonable and provide funds for water management activities in response to the current drought conditions. The biennial budget and rates and charges propose:

- $100 million deposited to the R&R Fund. This $100 million along with the increased funding from revenues for the CIP included in the budget proposal will delay new money bond issues until FY 2017/18 and will reduce the required debt service during the biennial budget period and over the ten-year financial plan. Also, the allowable balance in the R&R Fund at the end of the fiscal year will be increased from

$95 million to $160 million. This will allow increased flexibility to carry over unexpended Pay-As-You-Go (PAYGo) funds from one year to the next.

- $100 million deposited to the Other Post-Employment Benefits (OPEB) Trust. As shown in the presentation to the F&I Committee on March 10, 2014, from Bartel Associates, LLC, Metropolitan's actuary, this funding reduces the liability for benefits accruing to Metropolitan from prior years. Metropolitan's annual required contribution (ARC) is reduced by $7.2 million in FY 2015/16 and all future years.
- Any remaining amounts over target, currently estimated at $150 million, will be placed in a Water Management Fund to cover costs associated with replenishing storage, purchasing transfers, and providing drought response programs. The estimated costs of replenishing storage based on current operational plans would more than exhaust the $150 million.

Proposed Rate Options for Board Consideration

Option #1(Staff Recommendation)—Proposed rate increases of 1.5 percent in FY 2014/15 and 1.5 percent in FY 2015/16.

This option continues funding the Board's key priorities as described in the February 11, 2014 Board Letter 8-1, including:

- Funding for the CIP of $513 million for the biennial period of FY 2014/15 and FY 2015/16, of which $466 million will be funded from revenues. This level of revenue-funded capital is appropriate given the significant portion of the capital program that is focused on replacement and refurbishment of capital facilities, and lessens the pressure on water rates from debt service in future years. This higher level of revenue-funded capital combined with withdrawals from the R&R Fund will cover 100 percent of the projected capital spending for the next three fiscal years.
- Continued funding of $132 million for the biennial period of FY 2014/15 and FY 2015/16 for storage programs in the region, the Central Valley, and the Colorado River system to cover the costs of storing or withdrawing supplies. This initiative helps reduce the likelihood that Metropolitan will need to declare a Water Supply Allocation in dry years.
- Continued funding of conservation programs at $40 million for the biennial period of FY 2014/15 and FY 2015/16 to help our member agencies and retail water agencies meet the state-mandated 20 percent by 2020 goal of reduced per capita water consumption and reduce the need to transport water into the Metropolitan service area or within Metropolitan's distribution system.
- Funding for the Local Resources Program incentives at $84 million for the biennial period of FY 2014/15 and FY 2015/16 to meet the 2010 Integrated Resources Plan Update goals for local resource development and reduce the need to transport water into the Metropolitan service area or within Metropolitan's distribution system.
- Fully funding the ARC for OPEB beginning in FY 2014/15, one year earlier than originally planned and continuing to fully fund the ARC thereafter. It is estimated that by the end of FY 2015/16, Metropolitan's OPEB liability will be approximately 45 percent funded.
- Funding of $831 million for the biennial period of FY 2014/15 and FY 2015/16 for Operations and Maintenance (O&M), including labor and benefits, water treatment chemicals, solids handling, professional services, and operating equipment purchases. This proposed O&M funding includes increased benefit costs, including retirement-related benefits, and merit increases; funding of positions in connection with succession planning; three new positions for Water System Operations to provide engineering support; and funding for two positions to provide additional interim support for the Bay-Delta initiative.
- Rate increases in the remaining eight years of the ten-year forecast ranging from 3 to 5 percent and meets all financial policy guidelines.

The cost-of-service reports supporting Option #1 are provided as **Attachment 4** – Metropolitan Water District of Southern California, FY 2014/15 Cost of Service Option 1, and **Attachment 5** – Metropolitan Water District of Southern California, FY 2015/16 Cost of Service Option 1.

Option #2—Proposed rate increases of 0.0 percent in FY 2014/15 and 1.5 percent in FY 2015/16.

This option includes all funding objectives identified in Option #1, but reduces revenue-funded capital by $28 million to $438 million over the biennial budget period and increases the withdrawals from the R&R Fund by a like amount. Rate increases in the remaining eight years of the ten-year forecast are slightly higher in the near term, and range from 3.5 to 5 percent, but fails to meet the revenue bond coverage policy in fiscal year 2017.

The cost-of-service reports supporting Option #2 are provided as **Attachment 6** – Metropolitan Water District of Southern California, FY 2014/15 Cost of Service Option 2, and **Attachment 7** – Metropolitan Water District of Southern California, FY 2015/16 Cost of Service Option 2.

Option #3—Proposed rate increases of 0.75 percent in FY 2014/15 and 1.25 percent in FY 2015/16.

This option includes all funding objectives identified in Option #1, but reduces revenue-funded capital by $16 million to $450 million over the biennial budget period and increases the withdrawals from the R&R Fund by a like amount. Rate increases in the remaining eight years of the ten-year forecast are slightly higher in the near term, and range from 3.1 to 5 percent.

The cost-of-service reports supporting Option #3 are provided as **Attachment 8** – Metropolitan Water District of Southern California, FY 2014/15 Cost of Service Option 3, and **Attachment 9** – Metropolitan Water District of Southern California, FY 2015/16 Cost of Service Option 3.

REVENUE REQUIREMENTS

Table 1 summarizes the revenue requirements for FY 2014/15 and 2015/16 under the three options.

Table 1. Revenue Requirements by Option

	Option 1		Option 2		Option 3	
Fiscal Year	**2014/15**	**2015/16**	**2014/15**	**2015/16**	**2014/15**	**2015/16**
Departmental O&M	$ 386,248,712	$ 390,951,466	$ 386,248,712	$ 390,951,466	$ 386,248,712	$ 390,951,466
General District Requirements						
State Water Project	495,708,877	515,004,362	495,708,877	515,004,362	495,708,877	515,004,362
Colorado River Aqueduct	29,178,396	36,503,152	29,178,396	36,503,152	29,178,396	36,503,152
Supply Programs	65,524,620	66,451,886	65,524,620	66,451,886	65,524,620	66,451,886
Demand Management	62,160,118	61,654,768	62,160,118	61,654,768	62,160,118	61,654,768
Capital Financing Program	571,258,865	545,707,370	564,258,865	524,707,370	566,258,865	534,707,370
Other O&M	27,462,998	26,634,780	27,462,998	26,634,780	27,462,998	26,634,780
Increase (Decrease) in Required Res	9,900,000	18,200,000	9,200,000	20,300,000	9,500,000	19,600,000
Total	1,261,193,874	1,270,156,318	1,253,493,874	1,251,256,318	1,255,793,874	1,260,556,318
Revenue Offsets	(135,791,692)	(149,902,442)	(135,753,166)	(149,525,981)	(135,772,334)	(149,699,116)
Net Revenue Requirements	$ 1,511,650,894	$ 1,511,205,342	$ 1,503,989,419	$ 1,492,681,803	$ 1,506,270,251	$ 1,501,808,668

Totals may not foot due to rounding

RATES AND CHARGES BY OPTION

The detailed rates and charges under the three options are as follows:

Table 2. Rates and Charges by Option

Effective January 1st	2014	Option 1		Option 2		Option 3	
		2015	2016	2015	2016	2015	2016
Tier 1 Supply Rate ($/AF)	$148	$158	$156	$155	$154	$157	$154
Tier 2 Supply Rate ($/AF)	$290	$290	$290	$290	$290	$290	$290
System Access Rate ($/AF)	$243	$257	$259	$253	$257	$255	$258
Water Stewardship Rate ($/AF)	$41	$41	$41	$41	$41	$41	$41
System Power Rate ($/AF)	$161	$126	$138	$125	$137	$125	$137
Full Service Untreated Volumetric Cost ($/AF)							
Tier 1	$593	$582	$594	$574	$589	$578	$590
Tier 2	$735	$714	$728	$709	$725	$711	$726
Full Service Exchange Cost ($/AF)	$445	$424	$438	$419	$435	$421	$436
Treatment Surcharge ($/AF)	$297	$341	$348	$335	$339	$337	$343
Full Service Treated Volumetric Cost ($/AF)							
Tier 1	$890	$923	$942	$909	$928	$915	$933
Tier 2	$1,032	$1,055	$1,076	$1,044	$1,064	$1,048	$1,069
Readiness-to-Serve Charge ($M)	$166	$158	$153	$155	$148	$157	$150
Capacity Charge ($/cfs)	$8,600	$11,100	$10,900	$10,900	$10,500	$11,000	$10,700

Metropolitan's Board establishes rates and charges for water services that, so far as practicable, result in revenues to pay for Metropolitan's operations and maintenance expenses, operating equipment, power costs on the CRA, SWP operations, maintenance, power and replacements costs, SWP capital charges, demand management programs, and supply programs. To develop each biennial budget proposal and establish Metropolitan's revenue requirement for a given period, Metropolitan staff assemble and calculate Metropolitan's operating expenses, capital financing costs and other requirements expected to be incurred during the fiscal years in the budget period—the cost of service. Staff also estimates offsetting revenue sources. This information is used to develop the proposed biennial budget and revenue requirements.

The ten-year forecast provides planning beyond the budget period and provides information to the Board on the impacts of different rate proposals and funding assumptions over a longer planning horizon.

Actual revenues and expenses may vary from budgeted amounts for a variety of reasons. Administrative Code Section 5202 (e) contemplates variation in actuals to budget and provides policy guidance to the Board. Metropolitan's financial obligations may include liabilities and future commitments, such as retiree obligations and debt service, that are not reflected in the budget but that can be addressed in a fiscally prudent manner to reduce future obligations and keep future rate increases reasonable within the policy guidance provided by Administrative Code Section 5202 (e).

As approved by the F&I Committee, staff will provide a mid-cycle biennial budget review in June 2015.

SUSPENSION OF THE TAX RATE RESTRICTION IN SECTION 124.5 OF THE MWD ACT

Metropolitan has assessed ad valorem taxes in its service area since its inception. Metropolitan has constitutional and statutory authority, as well as voter authorization, to collect revenues through ad valorem taxes assessed on real property within its service territory. Generally, Metropolitan may collect ad valorem taxes to cover its

general obligation bonds and its SWC payments, as described below. Since fiscal year 1990/91, Section 124.5 of the MWD Act has limited property tax collections to the amount necessary to pay the total of annual debt service on Metropolitan's general obligation bonds plus a small portion of its SWC payment obligation, limited to the debt service on state general obligation bonds (Burns-Porter bonds) for facilities benefitting Metropolitan as of 1990/91. Under this approach, ad valorem property tax revenue has been decreasing, and will continue to decrease, as Metropolitan's general obligation bonds and the Burns-Porter bonds are paid off. In the meantime, Metropolitan's SWC obligations are increasing. For example, the State is expecting substantial costs associated with repair and replacement of the 50-year-old SWP infrastructure. Further, implementation of the Delta Habitat Conservation and Conveyance Program and Bay Delta Conservation Plan (BDCP) would lead to increased SWC payments.

Section 124.5 permits Metropolitan to suspend the restriction discussed above if, following a public hearing, the Board finds that tax revenue in excess of the restriction is essential to the fiscal integrity of Metropolitan. Notice of the public hearing was filed with the offices of the Speaker of the California Assembly and the President pro Tempore of the Senate on February 20, 2014. As described previously, the public hearing was held on March 11, 2014.

The Board will undertake consideration of suspending the tax rate restriction in August. The ad valorem tax rate is set by the Board in August of each year once the tax rolls from the County Assessor are received by Metropolitan. Taking action to suspend the restriction in August concurrent with action to set the tax rate will give the Board the flexibility to set the rate at the minimum necessary to recover the debt service on Metropolitan's General Obligation bonds and the SWP Burns-Porter bonds, or set the rate up to the current rate of 0.0035 percent of assessed valuations to cover a portion of its SWC payment obligation. As mentioned previously, if the Board decides to not suspend the tax rate restriction in August, any reduction in revenues will be made up from the R&R Fund, and projected rate increases in FY 2016/17 and FY 2017/18 will be 2 percent higher.

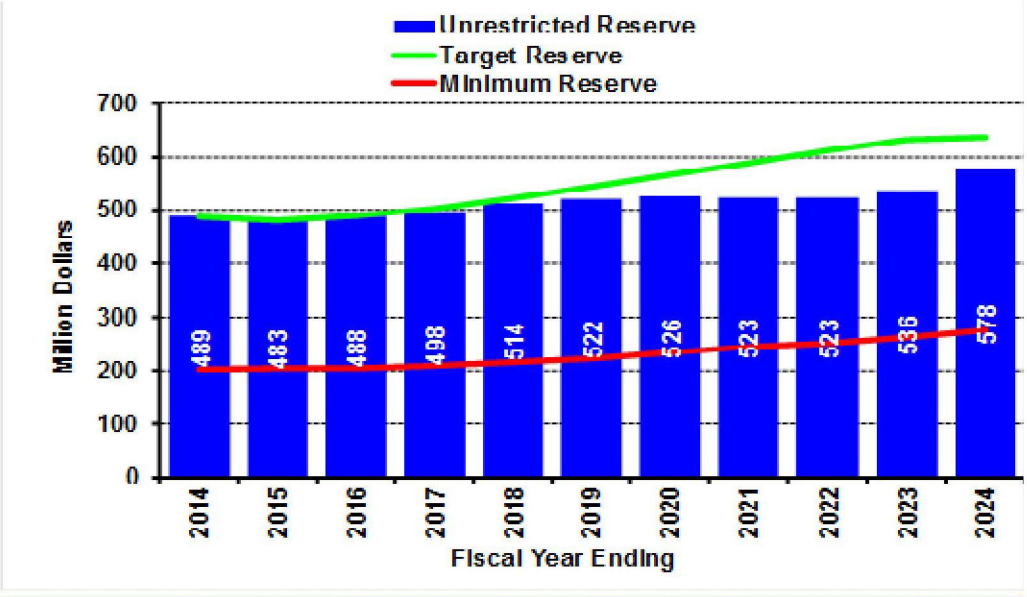
TEN-YEAR FINANCIAL FORECAST

The proposed biennial budget and ten-year financial forecast comprise Metropolitan's long-range financial plan. The biennial Budget establishes the foundation for a ten-year forecast of water sales, expenditures, revenues, projected rate increases and financial indicators. Incorporating a ten-year financial forecast within the biennial budget process helps ensure the long-range financial plan is continuously updated every two years to reflect any changes in underlying assumptions and/or financial policies. This approach is well suited to the dynamic environment Metropolitan operates in, rather than periodic updates of a stand-alone long-term financial planning document. The ten-year forecast is included as **Attachment 10** – Ten-Year Financial Forecast to this letter.

The proposed biennial budget sets the stage for predictable and reasonable rate increases over the ten-year planning period. Use of reserves over target and higher levels of revenue funding for the CIP will result in lower revenue requirements in later years of the forecast. Depositing $100 million to the OPEB Trust will lower operating expenses beginning in FY 2015/16 by $7.2 million and every year thereafter extending beyond the forecast and resulting in a significant savings to Metropolitan. Use of revenues to fund the CIP will postpone and reduce any needed new money bond issues. Over the ten-year forecast, the higher proposed levels of revenue funding for the CIP will result in debt service by FY 2023/24 that is approximately $50 million less than it would be under previous assumptions. These lower costs combined with maintaining the ad valorem tax rate at its current level throughout the ten-year period will mitigate increases in future water rates and charges.

Key financial indicators of the ten-year forecast are summarized in Figure 1.

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



Ave Rate Increase	5%	1.5%	1.5%	3.0%	3.0%	3.5%	5.0%	5.0%	5.0%	5.0%	5.0%
Sales, MAF	1.97	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
CIP, $M	200	245	268	275	281	284	293	304	312	317	313
PAYGO, $M	125	245	221	200	204	201	176	182	187	190	188
Rev. Bond Cvg	2.1	2.0	2.0	2.0	2.0	2.1	2.2	2.4	2.6	2.7	2.9
Fixed Chg Cvg	2.0	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4
Inflation	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
AV Taxes, $M	81	90	92	94	96	99	101	103	105	108	110
BDCP, $M				15	24	46	91	148	204	259	302

The ten-year forecast, which is presented in Attachment 2, assumes the following:

- Sales are forecasted throughout the period at 1.75 MAF;
- Beginning in FY 2019/20, sixty percent of the CIP is revenue funded. Revenue-funding a percentage of the CIP costs rather than using a fixed dollar amount allow revenue-based funding to adjust to changes in the CIP over time. For the first five years of the ten-year forecast, approximately 70to 100 hundred percent of the CIP is funded from revenues;
- OPEB will be 63 percent funded by FY 2023/24, assuming full funding of the ARC and $100 million is deposited to the OPEB Trust at June 30, 2014;
- Metropolitan's investments in storage programs continue, providing regional supply reliability;
- Demand management programs continue to be funded to help ensure that our member agencies and retail water agencies meet the 20 percent by 2020 goal of reduced per capita water consumption;
- Resulting rate increases beyond the biennial budget period are in a range of 3 percent to 5 percent each year.

Policy

MWD Act Sections 124.5 and 134

Metropolitan Water District Administrative Code Section 5107: Biennial Budget Process

Metropolitan Water District Administrative Code Section 5109: Capital Funding from Current Revenues

Metropolitan Water District Administrative Code Section 5202 (e): Fund Parameters (Water Rate Stabilization Fund)

Metropolitan Water District Administrative Code Sections 4301 (a): Cost of Service and Revenue Requirement

Metropolitan Water District Administrative Code Sections 4304: Apportionment of Revenues and Setting of Water Rates

California Environmental Quality Act (CEQA)

CEQA determination for Options #1, #2, #3 and #4:

The proposed action is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

The CEQA determination is:Determine that the proposed action is not subject to CEQA pursuant to Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines.

Board Options

Option #1

Adopt the CEQA determination that the proposed action is not subject to CEQA and is categorically exempt, and

a. Approve the FY 2014/15 and FY 2015/16 biennial budget and:
    i. Appropriate $2,163.5 million for Metropolitan O&M and operating equipment, power costs on the Colorado River Aqueduct, SWP operations, maintenance, power and replacement costs and SWP capital charges; demand management programs including the local resources and conservation credits program; and costs associated with supply programs;
    ii. Appropriate as continuing appropriation, $650.6 million for FY 2014/15 and 2015/16 debt service on Metropolitan general obligation and revenue bonds;
    iii. Authorize the use of $466.4 million in operating revenues to fund the Capital Investment Plan, and raise the end-of-fiscal-year fund balance of the R&R Fund to $160 million on June 30, 2014 and thereafter; and
    iv. Authorize use of reserves over target on June 30, 2014 in the manner set forth in this letter.
b. Determine that the revenue requirement to be paid from rates and charges is $1,511.7 million in FY 2014/15 and $1,511.2 million in FY 2015/16;
c. Approve water rates effective January 1, 2015, and January 1, 2016, as shown under Option #1 in Table 2 above;
d. Adopt the Resolution Fixing and Adopting Water Rates to be effective January 1, 2015 and 2016, in the form of **Attachment 11**, using the rates shown under Option #1 in Section 1 of the Resolution;
e. Adopt the Resolution Fixing and Adopting A Readiness-To-Serve Charge For Calendar Year 2015, in the form of **Attachment 12**, using the charge shown under Option #1 in Section 5 of the Resolution;
f. Adopt the Resolution Fixing and Adopting A Capacity Charge For Calendar Year 2015, in the form of **Attachment 13**, using the charge shown under Option #1 in Section 6 of the Resolution;
g. Approve the Ten-Year Financial Forecast; and,
h. Determine that if the ad valorem tax rate restriction is not suspended, fixed revenues available to meet the fixed payment obligations of the SWC will continue to decline and, without other actions, the imbalance in fixed to variable revenues will increase. The revenue shortfall in the biennial budget will be made up from the R&R Fund.

Fiscal Impact: Revenues from rates and charges of $1,489.5 million in FY 2014/15, and $1,507.2 million in FY 2015/16, and an increase in the overall effective rate of 1.5 percent in 2015 and 1.5 percent in 2016 if the rates and charges are adopted as recommended.

Option #2

Adopt the CEQA determination that the proposed action is not subject to CEQA and is categorically exempt, and

a. Approve the FY 2014/15 and FY 2015/16 biennial budget and:
   i. Appropriate $2,163.5 million for Metropolitan O&M and operating equipment, power costs on the Colorado River Aqueduct, SWP operations, maintenance, power and replacement costs and SWP capital charges; demand management programs including the local resources and conservation credits program; and costs associated with supply programs;
   ii. Appropriate as continuing appropriation, $650.6 million for FY 2014/15 and 2015/16 debt service on Metropolitan general obligation and revenue bonds;
   iii. Authorize the use of $438.4 million in operating revenues to fund the Capital Investment Plan, and raise the end-of-fiscal-year fund balance of the R&R Fund to $160 million on June 30, 2014 and thereafter ; and
   iv. Authorize use of reserves over target on June 30, 2014 in the manner set forth in this letter.
b. Determine that the revenue requirement to be paid from rates and charges is $1,504.0 million in FY 2014/15 and $1,492.7 million in FY 2015/16;
c. Approve water rates effective January 1, 2015, and January 1, 2016, as shown under Option #2 in Table 2 above;
d. Adopt the Resolution Fixing and Adopting Water Rates to be effective January 1, 2015 and 2016, in the form of **Attachment 11**, using the rates shown under Option #2 in Section 1 of the Resolution;
e. Adopt the Resolution Fixing and Adopting A Readiness-To-Serve Charge For Calendar Year 2015, in the form of **Attachment 12**, using the charge shown under Option #2 in Section 5 of the Resolution;
f. Adopt the Resolution Fixing and Adopting A Capacity Charge For Calendar Year 2015, in the form of **Attachment 13**, using the charge shown under Option #2 in Section 6 of the Resolution;
g. Approve the Ten-Year Financial Forecast; and,
h. Determine that if the ad valorem tax rate restriction is not suspended fixed revenues available to meet the fixed payment obligations of the SWC will continue to decline and, without other actions, the imbalance in fixed to variable revenues will increase. The revenue shortfall in the biennial budget will be made up from the R&R Fund.

Fiscal Impact: Revenues from rates and charges of $1,479.1million in FY 2014/15, and $1,484.1 million in FY 2015/16, and an increase in the overall effective rate of 0.0 percent in 2015 and 1.5 percent in 2016 if the rates and charges are adopted as recommended.

Option #3

Adopt the CEQA determination that the proposed action is not subject to CEQA and is categorically exempt, and

a. Approve the FY 2014/15 and FY 2015/16 biennial budget and:
   i. Appropriate $2,163.5 million for Metropolitan O&M and operating equipment, power costs on the Colorado River Aqueduct, SWP operations, maintenance, power and replacement costs and SWP capital charges; demand management programs including the local resources and conservation credits program; and costs associated with supply programs;
   ii. Appropriate as continuing appropriation, $650.6 million for FY 2014/15 and 2015/16 debt service on Metropolitan general obligation and revenue bonds;
   iii. Authorize the use of $450.4 million in operating revenues to fund the Capital Investment Plan, and raise the end-of-fiscal-year fund balance of the R&R Fund to $160 million on June 30, 2014 and thereafter; and
   iv. Authorize use of reserves over target on June 30, 2014 in the manner set forth in this letter.
b. Determine that the revenue requirement to be paid from rates and charges is $1,506.3 million in FY 2014/15 and $1,501.8 million in FY 2015/16;
c. Approve water rates effective January 1, 2015, and January 1, 2016, as shown under Option #2 in Table 2 above;
d. Adopt the Resolution Fixing and Adopting Water Rates to be effective January 1, 2015 and 2016, in the form of **Attachment 11**, using the rates shown under Option #3 in Section 1 of the Resolution;

e. Adopt the Resolution Fixing and Adopting A Readiness-To-Serve Charge For Calendar Year 2015, in the form of **Attachment 12**, using the charge shown under Option #3 in Section 5 of the Resolution;
f. Adopt the Resolution Fixing and Adopting A Capacity Charge For Calendar Year 2015, in the form of **Attachment 13**, using the charge shown under Option #3 in Section 6 of the Resolution;
g. Approve the Ten-Year Financial Forecast; and
h. Determine that if the ad valorem tax rate restriction is not suspended, fixed revenues available to meet the fixed payment obligations of the SWC will continue to decline and, without other actions, the imbalance in fixed to variable revenues will increase. The revenue shortfall in the biennial budget will be made up from the R&R Fund.

Fiscal Impact: Revenues from rates and charges of $1,484.1 million in FY 2014/15, and $1,493.8 million in FY 2015/16, and an increase in the overall effective rate of 0.75 percent in 2015 and 1.25 percent in 2016 if the rates and charges are adopted as recommended.

Option #4

Adopt the CEQA determination that the proposed action is not subject to CEQA and is categorically exempt, and instruct staff to modify the proposed budgets and the recommended rates and charges as specified by the Board.

Fiscal Impact: Unknown

Staff Recommendation

Option #1

Gary Breaux *Date*
Chief Financial Officer

Jeffrey Kightlinger *Date*
General Manager

Attachment 1 – General Manager's Business Plan Strategic Priorities for FY 2014/15 and FY 2015/16
Attachment 2 – Public Hearing Comments
Attachment 3 – Biennial FY 2014/15 and 2015/16 Budget Summary
Attachment 4 – Metropolitan Water District of Southern California, FY 2014/15 Cost of Service Option 1
Attachment 5 – Metropolitan Water District of Southern California, FY 2015/16 Cost of Service Option 1
Attachment 6 – Metropolitan Water District of Southern California, FY 2014/15 Cost of Service Option 2
Attachment 7 – Metropolitan Water District of Southern California, FY 2015/16 Cost of Service Option 2
Attachment 8 – Metropolitan Water District of Southern California, FY 2014/15 Cost of Service Option 3
Attachment 9 – Metropolitan Water District of Southern California, FY 2015/16 Cost of Service Option 3
Attachment 10 – Ten-Year Financial Forecast
Attachment 11 – Resolution Fixing and Adopting Water Rates to be Effective January 1, 2015 and 2016
Attachment 12 – Resolution Fixing and Adopting A Readiness-To-Serve Charge For Calendar Year 2015
Attachment 13 – Resolution Fixing and Adopting A Capacity Charge For Calendar Year 2015

General Manager's Business Plan Strategic Priorities

For Fiscal Year 2014/15 and Fiscal Year 2015/16

The proposed biennial budget is intended to provide funding for the Metropolitan's operations, capital programs and all ancillary functions of Metropolitan for Fiscal Years 2014/15 and 2015/16. The key strategic priorities that the Office of the General Manager will be focused on for the period covered by the biennial budget are addressed below. An update and any revisions to those strategic priorities will be provided at the close of FY 2014/15.

Strategic Priority #1: Complete the Bay-Delta Conservation Plan (BDCP) and the associated Environmental Impact Report/Statement

During Fiscal Year 2014/15, the goal will be to complete the environmental documentation and necessary financing agreements so that Metropolitan's Board of Directors can make a sound business decision on participation in and implementation of a BDCP.

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

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

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

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

Staff will work closely with the Board to manage Metropolitan's water supply reserves in the face of unprecedented drought conditions in California and throughout the Southwest. The

actions will include implementation of storage withdrawals, coordination of deliveries with the member agencies, close monitoring of drought conditions and possible allocation actions as part of the WSDM plan and targeted outreach on conservation efforts.

Strategic Priority #3: Educate the Public and Stakeholders on Critical Water Supply Conditions and Critical Water Management Decisions.

The coming two years are shaping up to be momentous years for the water industry in California. The current drought gripping California has caused unprecedented water conditions for much of California and led to dramatic response at the state and federal level. These conditions are likely to deepen at least through 2014 if not beyond. Additionally, events are shaping up for key decisions on a Bay-Delta plan, a potential water bond, significant legislative proposals for statewide action and key Colorado River milestones. It will be essential to fully engage the public and key stakeholders in Metropolitan's service area and statewide in the importance of these issues, as decisions made over the next two years will be felt for a generation.

Strategic Priority #4: Employee Development

The proposed budget calls for Metropolitan to cease its managed attrition that has shrunk Metropolitan from 2,400 full-time employee positions to a current workforce of approximately 1,750. Recruitment activity will be expanded to fully replace all retirements and actually add some positions to bring the work force to 1,828 positions over the next two years. Increased employee cross-training and employee development efforts will be needed to meet the challenge of increased retirements brought about by an aging workforce.

Strategic Priority #5: Local Projects and Integrated Resources Plan Updates

Staff intends to review its Local Resources Program and conservation rebate programs during this drought period to review what new actions might be appropriate, learn from this experience as to how to improve our programs and work with the public and member agencies on expanding conservation efforts. Metropolitan's IRP was adopted in 2010 and will be updated in 2015 along with the state required Regional Urban Water Management Plan.

Public Comments

Public Hearing: Proposed Rates and Charges held March 11, 2014

The following members of the public spoke in opposition of the proposed water rates and charges:

Conner Everts, Southern California Watershed Alliance
Jerry Kern, Councilmember, City of Oceanside
Patricia Raetz, Oceanside Utilities Commission
DeAna Verbeke, Helix Water District
Gary Felien, Oceanside City Council
Alan Smerican, Santa Fe Irrigation District
James H. Knott, Vice Chair, City of Oceanside Utilities Commission
Tom Wornham, San Diego County Water Authority
Mark Westin, San Diego County Water Authority
Jim Murtland, Rincon Municipal Water District/SDCWA
Dennis Cushman, San Diego County Water Authority

Letters of support were received from the following agencies:

Three Valleys Municipal Water District
West Basin Municipal Water District
Western Municipal Water District

Letters of opposition were received from the following agencies:

City of Coronado
City of Oceanside
City of Laguna Hills
City of Lawndale
City of Poway
City of San Diego, Mayor's Office
City of San Diego, Public Utilities
Helix Water District
Olivenhain Municipal Water District
San Diego County Board of Supervisors
San Diego Regional Economic Corporation
San Diego Taxpayers Association
Santa Fe Irrigation District

Public Comments

Public Hearing to Consider Suspending the Tax Rate Limitations in Section 124.5 of the MWD Act to Maintain the Ad Valorem Tax Rate held March 11, 2014

The following members of the public spoke in opposition of the proposed Ad Valorem tax:

Conner Evans, Southern California Watershed Alliance
Tom Wornham, San Diego County Water Authority
Jerry Kern, Councilmember, City of Oceanside
James H. Knott III, Vice Chair, City of Oceanside Utilities Commision
Alan Smerican, Santa Fe Irrigation District
Gary Felien, Oceanside City Council

Letters of opposition were received from the following agencies:

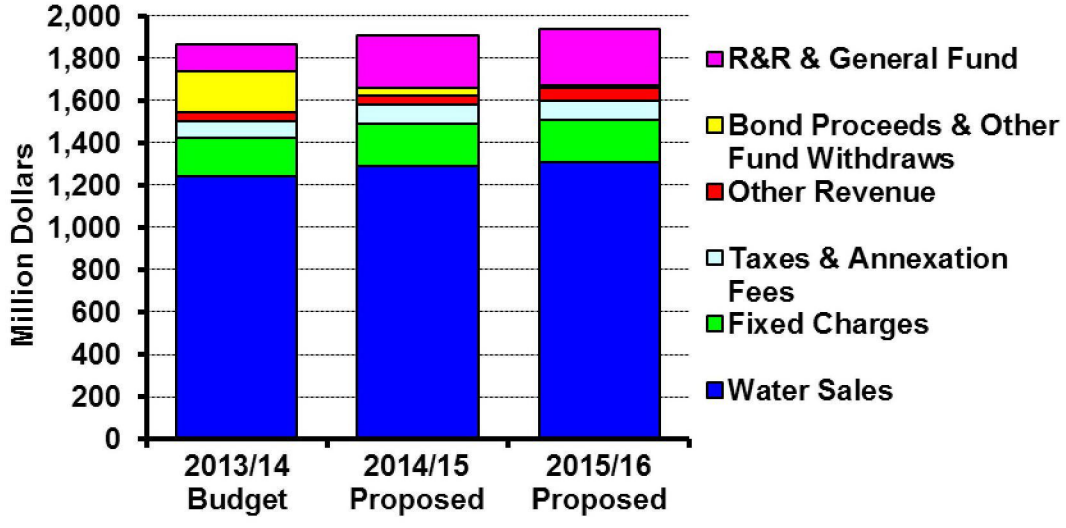
City of San Diego, Public Utilities
San Diego Regional Economic Corporation

Biennial Budget Summary FY 2014/15 & 2015/16

The proposed biennial budget for fiscal years 2014/15 and 2015/16 (FY 2014/15 and FY 2015/16) provides funding for Metropolitan's key priorities while meeting or exceeding all financial policy guidelines, with proposed overall rate increases of 1.5 percent in each year of the proposed biennial budget. The proposed overall rate increases of 1.5 percent are at their lowest level in the past ten years.

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

Figure 1. Sources of Funds



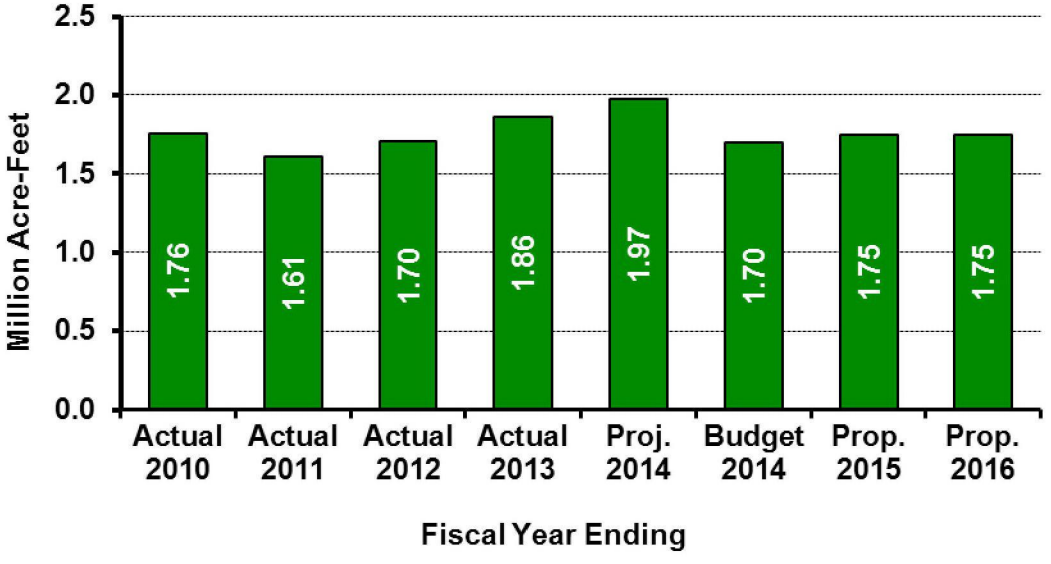
SOURCES OF FUNDS

Estimated revenues from water sales, fixed charges (readiness-to-serve charge and capacity charge), taxes and annexation fees, and other miscellaneous income (interest income, power recovery, etc.)are projected to be $1.63 billion for FY 2014/15and $1.66billion for FY 2015/16. For FY 2014/15, this is $80.3 million more than the FY 2013/14budget,and for FY 2015/16, this is $32.1 million more than FY 2014/15. The increase in revenues is due toincreases in water rates and charges in calendar year 2015 and calendar year 2016 and maintaining the ad valorem tax rate at .0035percent of assessed valuations. Figure 1 shows the major sources of funds. Summaries of sources and uses of funds are shown in Tables 6, 7 and 8 at the end of thissection. A description of each revenue source is included in the Glossary of Terms.

Water Sales

Revenues from water sales are budgeted at $1,290.6 million in FY 2014/15 and $1,310.8 million in FY2015/16, and are based on rates and charges adopted by the Board for January 1, 2014. In addition, water rates and charges are proposed to increase by 1.5 percent overall effective January 1, 2015 and 1.5 percent overall effective January 1, 2016.Water sales for both 2014/15and 2015/16are estimated to be 1.75 million acre-feet (MAF), an increase of 50 thousand acre-fee (TAF) from the FY 2013/14 budget.

Figure 2. Water Sales Trend



The FY 2014/15fiscal year water sales include 1.57 MAF of firm sales and 181 thousand acre-feet (TAF)ofExchange Water. Treated sales are estimated to be 910 TAF, or 52 percent of total sales in FY 2014/15. The FY 2015/16fiscal year water sales include 1.57 MAF of firm salesand 179 TAF ofExchange Water. Treated sales are estimated to be 898 TAF, or 51 percent of total sales in FY 2015/16. Figure 2 shows the trend of water sales.

Taxes and Annexation Fees

Revenues from taxes and annexation fees, which will be used to pay voter-approved debt service on general obligation bonds and a portion of the capital costs of the State Water Project (SWP), are estimated to be $90.2 million in FY 2014/15 and $92.2 million in FY 2015/16.The ad valorem tax rate is assumed to remain at the current level of .0035 percent of assessed value; assessed valuations are projected to increase by 2.5 percent each fiscal year.

Fixed Charges

Fixed charges include the Capacity Charge and Readiness-to-Serve Charge. InFY 2014/15, these charges are estimated to generate $37.5 million and $162.0 million, respectively. In FY 2015/16, these charges are estimated to generate $43.3 million and $155.0 million, respectively. In total this represents a $17.3 million increase from the FY 2013/14 to FY 2014/15, and a $0.7 million decrease from the FY 2014/15 to the FY 2015/16 budget.

Other Revenue

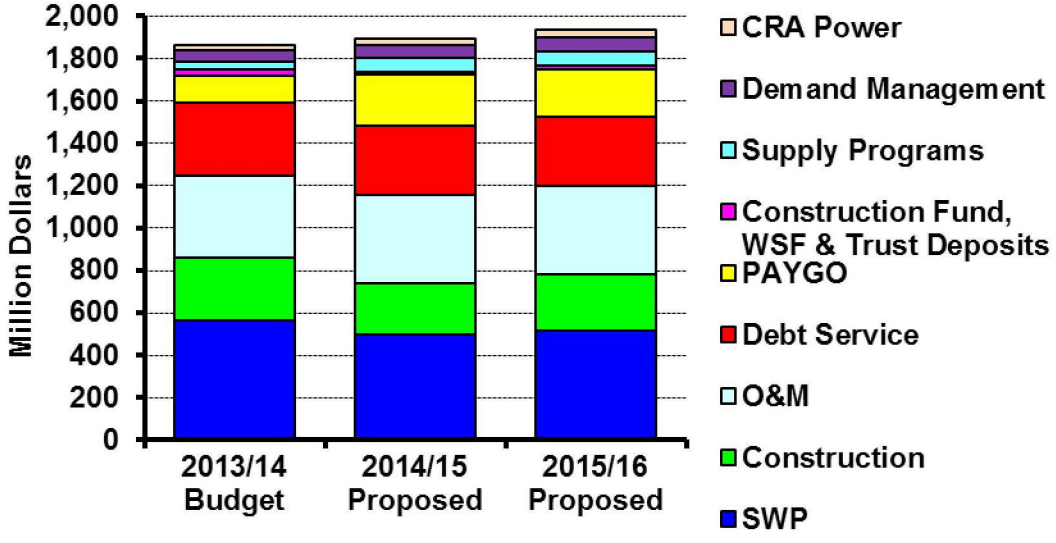
Interest earnings are estimated to total $16.2 million and $27.9 million for FY 2014/15 and FY 2015/16respectively (including trust accounts and construction funds), primarily due to higher assumed interest rates.

Receipts from hydroelectric and Colorado River Aqueduct (CRA) power sales are estimated to be $19.3 million for FY 2014/15 and $18.9 million for FY 2015/16.

Other Sources

For FY 2014/15 and FY 2015/16 Metropolitan does not plan to issue anynew debt. The funding requirements of the CIP will be met from current operating revenues (i.e., budgeted PAYGO) and by drawing down the R&R fund balance. In FY 2014/15, a total of $1.89 billion will be available for expenditures and other obligations and in FY 2015/16 this figure will increase to $1.93billion.

Figure 3. Uses of Funds



USES OF FUNDS

Total uses of funds are $1.89 billion for FY 2014/15 and $1.93 billion for FY 2015/16. Figure 3 shows the breakdown of expenditures and other obligations that make up the Uses of Funds.

Colorado River Aqueduct Power

CRA power costs are projected to be $29.2 million in FY 2014/15 and $36.5 million in FY 2015/16 based on pumping 882 TAF and 876 TAF, respectively, through the CRA. FY 2015/16 is $7.3 million higher despite similar pumping as a result of the need to purchase supplemental energy.

State Water Project

State Water Project (SWP) expenditures are budgeted at $495.7 million for FY 2014/15 and $515.0 million in FY 2015/16. This is based on total deliveries of 1.03 MAF for FY 2014/15, of which 94 TAF are received via exchange, and 1.02 TAF for FY 2015/16, of which 94 TAF are received via exchange.

SWP power costs are expected to be $183.8 million for FY 2014/15 and $194.0 million for FY 2015/16 and include the cost of pumping 912 TAF and 907 TAF respectively.

For FY 2014/15, the average total unit cost of SWP power is expected to be about $202 per acre-foot, which includes $18 per acre-foot for fixed power costs and $183 per acre-foot for variable pumping costs. For FY 2015/16, the average total unit cost of SWP power is expected to be about $214 per acre-foot, primarily for variable pumping costs.

SWP minimum operations, maintenance, power, and replacement charges are estimated to be about $183.4 million in bothFY 2014/15

and FY 2015/16. FY 2014/15 capital charges are expected to decrease $19.5 million from the FY 2013/14 budget but then increase $6.7 million in FY 2015/16. The initial decrease reflects incorporation of rate management credits into the forecast of SWP costs. Rate management credits result from a provision of the State Water Contract that provides for the reduction of capital charges based on differences between the Department of Water Resources' collections from the SWP contractors and the actual amounts paid for capital-related charges.

Demand Management Costs

Metropolitan provides financial assistance to its member agencies for the development of local water recycling and groundwater recovery projects through the Local Resource Program (LRP). Metropolitan also provides financial assistance for the development of conservation programs through the Conservation Credits Program (CCP).

As part of the LRP, Metropolitan entered into agreements to provide financial assistance to water-recycling projects, principally for landscape irrigation, groundwater recharge, and industrial uses. Metropolitan expects to provide incentives for the production of about 187 TAF of recycled water in each of FY 2014/15 and FY 2015/16.

Metropolitan also entered into agreements to provide financial assistance to projects to treat contaminated groundwater for potable uses. Metropolitan expects to provide incentives for the production of about 77 TAF of recovered groundwater in each of FY 2014/15 and FY 2015/16.

The CCP provides financial assistance to customers in Metropolitan's service area for water conservation programs. The budget for CCP provides rebate funding for residential, commercial, industrial, and landscape conservation activities. The FY 2014/15 and FY 2015/16 funding for CCP is budgeted at $20 million per year.

The CCP and LRP programs reduce the need to transport water into the Metropolitan service area or within Metropolitan's distribution system.

OPERATIONS AND MAINTENANCE

The FY 2013/14 operations and maintenance (O&M) budget has been restated to reflect the redistribution of a portion of the $10 million in OPEB funding in FY 2013/14 to salaries and benefits in the same manner that retirement-related expenses are reflected in the FY 2014/15 and FY 2015/16 budgets. The O&M portion, or $8.4 million of the $10 million OPEB funding, was redistributed to the Department budgets with $1.6 million remaining in Other O&M. The FY 2013/14 Restated budget also includes an additional $0.2M of Ethics department expenses authorized by the Board in August 2013.

The FY 2014/15O&M budget, including operating equipment purchases, is $413.7 million. This is $23.2 million, or 6.0 percent, higher than the FY 2013/14 restated budget of $390.5 million. The FY 2015/16 O&M budget is $417.6 million, an increase of $3.9 million, or 0.9 percent.Table 1 summarizes the O&M budget by expenditure type. A more detailed discussion of significant factors impacting the O&M budget follows Table 1.

Table 1.2014/15 Operations & Maintenance Annual Budget (dollars) by Expenditure Type

	2013/14 Restated Budget	2014/15 Proposed	2015/16 Proposed	2013/14 Restated Budget vs. 2014/15 Proposed	2014/15 Proposed vs. 2015/16 Proposed
Salaries & Benefits (1)	244,650.9	264,694.7	267,409.5	20,043.9	2,714.7
Chemicals, Solids, and Power (2)	25,413.4	26,565.7	27,644.2	1,152.3	1,078.5
Outside Services	41,232.5	43,426.4	43,814.2	2,193.9	387.8
Materials & Supplies (3)	24,807.5	25,379.9	25,767.7	572.4	387.8
Other	47,234.5	46,004.0	44,760.4	(1,230.5)	(1,243.6)
Operating Equipment	7,124.6	7,640.9	8,190.3	516.3	549.4
Total	**390,463.4**	**413,711.7**	**417,586.2**	**23,248.3**	**3,874.5**

Totals may not foot due to rounding
(1) Includes overhead credit for construction and savings from liability reduction
(2) Costs associated with treatment only.
(3) Without chemicals associated with treatment plants.

FY 2014/15 O&M Budget

The proposed FY 2014/15 O&M budget includes $413.7 million for labor and benefits, water treatment chemicals, power, and solids handling, materials and supplies, professional services, and operating equipment purchases. This is $23.2 million, or 6.0 percent, higher than the FY 2013/14restated budget of $390.5 million due primarily to an increase in retirement-related benefit costs and merit increases for qualified employees, variable treatment costs, and outside services.

Salaries and Benefits – Labor costs, not including those charged to construction, are $264.7 million. This is $20.0 million, or 8 percent, higher than the FY 2013/14 restated budget of $244.6 million. This increase is primarily the result of an increase in retirement-related benefit costs and merit increases for qualified employees; three additional positions for Water Systems Operations, funding of two additional positions in the Bay-Delta program and funding additional positions to assist with succession planning.

Salaries not including fringe benefits or the overhead credit are 4 percent higher than the FY 2013/14 restated budget. Fringe benefits are $10.7 million, or 11.1percent higher, than the FY 2013/14 restated budget primarily as a result of full funding of the annual actuarial required contribution (ARC) for Metropolitan's Other Post-Employment Benefits (OPEB) liability. Future annual ARC amounts are mitigated by a proposed additional deposit to the OPEB Trust of $100 million in FY 2013/14. The FY 2015/16 budget reflects $7.2 million reduction in the anticipated ARC due to this deposit.

The total personnel complement for the FY 2014/15 budget is 1,905 authorized positions, including 19 agency and district temporary full-time equivalents (FTEs), and reflects an increase of 2 net positions from the FY 2013/14 budget. Total regular authorized employee positions are 137 positions below the FY 2008/09 budget. The proposed FY 2014/15 budget assumes a vacancy rate of approximately 3.2 percent and 3 regular employee positions remain unfunded.

Other O&M– Outside services is anticipated to increase $2.2 million in FY 2014/15 primarily as a result of an increase for security equipment maintenance and Emergency Maintenance System (EMS) storage costs.

Chemicals, solids, and power reflect the cost of the water treatment process and are anticipated to increase by $1.1 million in FY 2014/15, driven by an overall increase in

chemical unit commodity prices and higher electricity rates.

FY 2015/16 O&M Budget

The proposed FY 2015/16 O&M budget is $417.6 million, an increase of $3.9 million, or 1 percent, compared to the FY 2014/15 budget. This increase is primarily due to merit increases for qualified employees, increase in fringe benefit costs, and forecasted increases in chemical and power costs to operate the treatment plants.

Salaries and Benefits – The FY 2015/16 O&M labor budget includes $7.2 million of anticipated savings on retirement related benefit costs as a result of the proposed $100 million deposit to the OPEB Trust in FY 2013/14.

The FY 2015/16 O&M labor budget is about $2.7 million higher than the FY 2014/15 budget driven primarily by an increase in overall fringe benefit costs and merit increases for qualified employees offset by savings on retirement related benefits costs.

Salaries not including fringe benefits or the overhead credit are 2 percent higher than the FY 2014/15 budget. Fringe benefits are only 0.3 percent lower than the FY 2014/15 budget as a result of the $7.2 million in anticipated savings on retirement related benefit costs.

The total budgeted personnel complement for FY 2015/16 is reduced by 1 position to 1,904 positions, including 19 agency and district temporary FTEs. The proposed FY 2015/16 budget assumes a vacancy rate of approximately 3.2 percent and 3 regular employee positions remain unfunded.

Other O&M –The cost of chemicals, power, and sludge disposal incurred in the water treatment process is anticipated to increase by $1.1 million in FY 2015/16 driven primarily by modest inflationary pressure on chemical commodity prices and electricity rates.

Figure 4. Departmental Budget by Expenditure Type

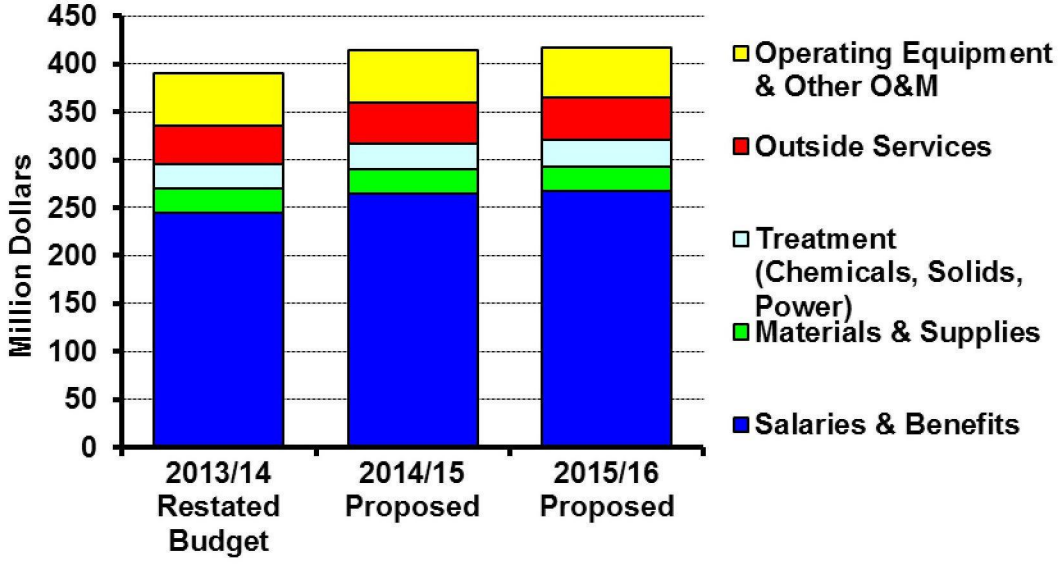


Figure 4 summarizes the total departmental O&M budget by expenditure type, of which 66 percent is for salaries and benefits.

Figure 5 depicts the distribution of the departmental O&M by organization without other O&M, the overhead credit, and operating equipment. Including treatment costs, the Water System Operations (WSO) Group accounts for 55 percent of the total departmental budget for both FY 2014/15 and FY 2015/16.A summary of the O&M budget by organization is shown in Table 2.

Figure 5. Departmental Budget by Organization (without Other O&M, operating equipment, and overhead credit)

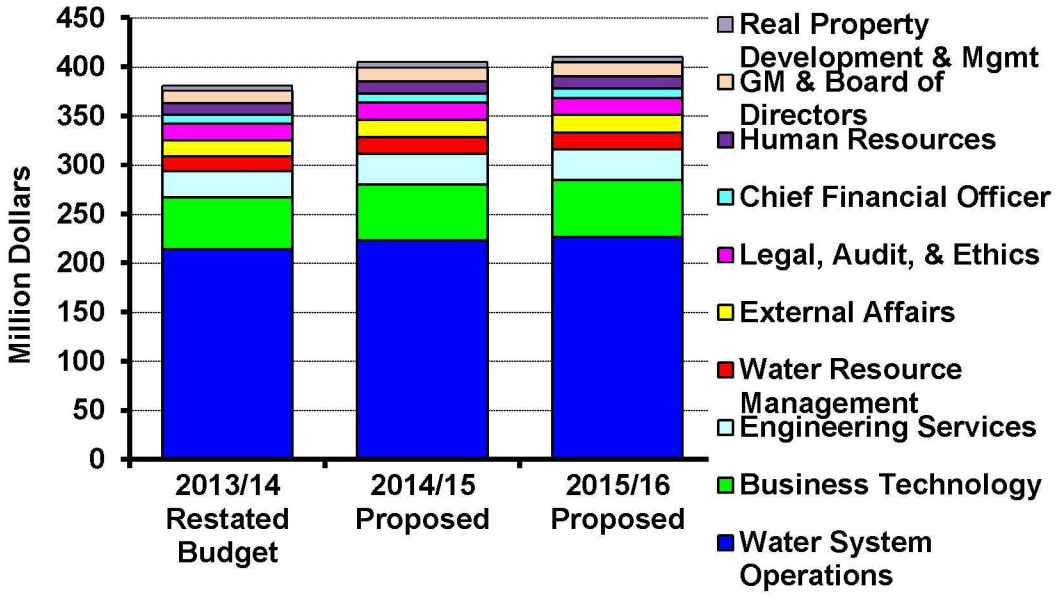


Table 2. Operations & Maintenance Budget by Organization

Departmental Units	2013/14 Restated Budget	2014/15 Proposed	2015/16 Proposed	2013/14 Restated Budget vs. 2014/15 Proposed	%	2014/15 Proposed vs. 2015/16 Proposed	%
Office of the General Manager	$ 12,854.2	$ 14,482.4	$ 14,676.6	$ 1,628.2	12.7%	$ 194.2	1.3%
Water System Operations w/o Variable Treatment	188,578.0	196,619.7	198,816.1	8,041.7	4.3%	2,196.4	1.1%
Water Resource Management	15,272.8	17,120.7	17,157.9	1,848.0	12.1%	37.1	0.2%
Engineering Services	26,289.7	31,125.3	31,457.0	4,835.6	18.4%	331.7	1.1%
Business Technology	53,167.8	56,848.2	57,776.7	3,680.4	6.9%	928.5	1.6%
Real Property Development & Mgmt	4,797.5	5,564.5	5,554.3	767.1	16.0%	(10.2)	(0.2%)
Human Resources	11,865.2	12,364.7	12,380.6	499.5	4.2%	15.9	0.1%
Office of the Chief Financial Officer	8,901.4	9,390.7	9,646.8	489.2	5.5%	256.2	2.7%
External Affairs	16,456.4	17,883.9	18,048.1	1,427.5	8.7%	164.2	0.9%
Subtotal - General Manager's Dep.	**338,182.9**	**361,400.0**	**365,514.0**	**23,217.1**	**6.9%**	**4,114.0**	**1.1%**
General Counsel	13,355.0	12,970.0	13,228.5	(385.0)	(2.9%)	258.5	2.0%
General Auditor	2,811.7	3,016.8	3,072.0	205.1	7.3%	55.2	1.8%
Ethics Office	846.4	1,040.5	1,040.4	194.1	22.9%	(0.0)	(0.0%)
Overhead Credit from Construction	(20,806.9)	(18,744.3)	(19,547.7)	2,062.6	(9.9%)	(803.5)	4.3%
Total Departmental Budget	**334,389.0**	**359,683.0**	**363,307.3**	**25,294.0**	**7.6%**	**3,624.2**	**1.0%**
Other O&M							
PC Replacement	3,525.0	-	-	(3,525.0)	(100.0%)	-	NA
CCP Vendor Administration	1,589.1	1,550.0	1,550.0	(39.1)	(2.5%)	-	NA
Performance Programs	673.0	673.0	673.0	-	NA	-	NA
Association Dues	4,981.0	5,065.9	5,184.8	84.9	1.7%	118.9	2.3%
Contingency	2,057.1	-	-	(2,057.1)	(100.0%)	-	NA
Insurance	9,566.6	11,344.0	9,800.0	1,777.4	18.6%	(1,544.0)	(13.6%)
Leases	532.6	565.0	600.0	32.4	6.1%	35.0	6.2%
Property Taxes	612.0	624.2	636.7	12.2	2.0%	12.5	2.0%
Subtotal - Other	**23,536.4**	**19,822.1**	**18,444.5**	**(3,714.3)**	**(15.8%)**	**(1,377.6)**	**(6.9%)**
TOTAL OPERATIONS & MAINTENANCE	**357,925.4**	**379,505.1**	**381,751.8**	**21,579.7**	**6.0%**	**2,246.6**	**0.6%**
Operating Equipment	7,124.6	7,640.9	8,190.3	516.3	7.2%	549.4	7.2%
Variable Treatment	25,413.4	26,565.7	27,644.2	1,152.3	4.5%	1,078.5	4.1%
GRAND TOTAL	**$ 390,463.4**	**$ 413,711.7**	**$ 417,586.2**	**$ 23,248.3**	**6.0%**	**$ 3,874.5**	**0.9%**

Totals may not foot due to rounding

LABOR

Total authorized positions (including temporary workers) for FY 2014/15 and FY 2015/16 are 1,905 and 1,904 positions respectively. Total O&M personnel are up by 2 district temporary positions (rounded) to 1,905 in 2014/15 and drop 1 regular full time position to a total of 1,904 in FY 2015/16. Positions dedicated to capital work are expected to decreaseslightly during the biennium while positions dedicated to O&M will increase slightly.The proposed FY 2014/15 and FY 2015/16 budget assumes a vacancy rate of approximately 3.2 percent and 3 positions remain unfunded in each budget year. Therefore, funded positions are lower than the authorized complement.

The personnel complement is broken down on Tables 3 and 4.

Table 3. Regular and Temporary Positions

	2012/13 Budget	2013/14 Budget	2014/15 Proposed	2015/16 Proposed	2013/14 Budget vs. 2014/15 Proposed	2014/15 Proposed vs. 2015/16 Proposed
Regular Full Time Positions	1,883	1,881	1,886	1,885	5	-1
District Temporary Positions	19	18	19	19	2	0
Agency Temporary Positions	6	5	-	-	-5	0
Total	**1,908**	**1,904**	**1,905**	**1,904**	**2**	**-1**

Totals may not foot due to rounding.

Table 4. O&M and Capital Staffing Levels

	2013/14 Budget	2014/15 Proposed	2015/16 Proposed
O&M Positions			
Regular Full Time Positions	1,598	1,608	1,604
District & Agency Temporary Positions	20	19	19
Total O&M	**1,618**	**1,627**	**1,623**
Capital Positions			
Regular Full Time Positions	283	278	281
District & Agency Temporary Positions	3	-	-
Total Capital	**286**	**278**	**281**
GRAND TOTAL	**1,904**	**1,905**	**1,904**

Totals may not foot due to rounding.

Supply Programs

Major supply program expenditures for FY 2014/15 and FY 2015/16 are estimated to be $65.5 million and $66.5 million respectively and include (may not foot due to rounding):

- $12.2 million in FY 2014/15 and $12.6 million in FY 2015/16 for operating and maintaining the IID/MWD conservation agreement;
- $27.2 million in FY 2014/15 and $21.1 million in FY 2015/16 for Colorado Programs;
- $14.3 million in FY 2014/15 and $20.1 million in FY 2015/16 for Central Valley Storage Programs;
- $8.6 million in FY 2014/15 and $9.4 million in FY 2015/16 for the Palo Verde Irrigation District (PVID) Land Management Program; and,
- $3.2 million in FY 2014/15 and $3.2 million in FY 2015/16 for transfersand in-basin programs.

ANNUAL CAPITAL INVESTMENT PLAN

The CIP budget for FY 2014/15 and FY 2015/16 is estimated to be $245.4 million and $267.9 million respectively. It is proposed to be funded by current operating revenues (i.e., budgeted PAYGo) and by drawing down the R&R fund balance. The FY 2014/15 capital budget is $49.2 million lower than the FY 2013/14 budget and the FY 2015/16 capital budget is $22.5 million higher than the FY 2014/15 budget.

The two largest areas of expenditures in the FY 2014/15 and FY 2015/16 CIP are Infrastructure Reliability and Water Quality. It is currently anticipated that infrastructure expenditures will continue to grow as more facilities reach the end of their service life.

Cash Funded Capital

The CIP is proposed to be funded by current operating revenues (budgeted PAYGo) and by drawing down the R&R fund balance. The PAYGo funding for FY 2014/15 has been budgeted at $245 million. In FY 2015/16, PAYGo funding has been budgeted at $221 million and in addition to a $47 million draw from the R&R fund will fund the $268 million CIP.

Debt Service

For FY 2014/15 and FY 2015/16 Metropolitan does not plan to issue anynew debt. Debt service payments in FY 2014/15 are budgeted to be $325.8 million and include $23.2 million in G.O. bond debt service, $297.5 million in revenue bond debt service, $3.9 million in variable rate debt administration costs (liquidity, remarketing fees, and broker-dealer fees), and $1.3 million for State Revolving Fund Loan payments. Total debt service costs in FY 2014/15 are expected to be $17.6 million less than the FY 2013/14 budget.

Debt service payments in FY 2015/16 are budgeted to be $324.7 million and include $23.3 million in G.O. bond debt service, $296.4 million in revenue bond debt service, $3.7 million in variable rate debt administration costs (liquidity, remarketing fees, and broker-dealer fees), and $1.3 million for State Revolving Fund Loan payments. Total debt service costs in FY 2015/16 are expected to be $1.1 million less than the FY 2014/15 budget.

Metropolitan currently has $4.5 billion in outstanding debt. Of this amount, $4.3 billion is revenue bond debt, of which 9 percent is in an unhedged variable rate mode.

Reserve Transfers

The FY 2014/15 budget forecasts an $5.6 million decrease in reserves by June 30, 2015 and includes the Water Rate Stabilization Fund (WRSF) and the Revenue Remainder Fund. In addition, the Treatment Surcharge Stabilization Fund (TSSF) is expected to decrease $4.4 million and the Water Stewardship Fund (WSF) is expected to decrease by $9.5 million.

The FY 2015/16 budget forecasts a $4.8 million increase in reserves by June 30, 2016 and includes the Water Rate Stabilization Fund (WRSF) and the Revenue Remainder Fund. In addition the Treatment Surcharge Stabilization Fund (TSSF) is expected to remain at zero and

the Water Stewardship Fund (WSF) is expected to decrease by $8.8 million.

FUND BALANCES AND RESERVE LEVELS

Metropolitan operates as a single enterprise fund for financial statements and budgeting purposes. Through its administrative code, Metropolitan identifies a number of accounts, which are referred to as funds, to separately track uses of monies for specific purposes as summarized in Table 5. Figure 6 shows the distribution of these funds by type.

Fund balances are budgeted to be $1.52billion at June 30, 2015. Of that total, $834.2 million is restricted by bond covenants, contracts, or board policy, and $683.8 million is unrestricted. In addition, fund balances are budgeted to be $1.49 billion at June 30, 2016. Of that total, $852.3 million is restricted by bond covenants, contracts, or board policy, and $633.4 million is unrestricted.

On June 30, 2015, the minimum and target reserve fund targets are estimated to be $204.9 million and $487.0 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the WRSF and Revenue Remainder Fund will total about $490.5 million, about $8.5 million above the target.

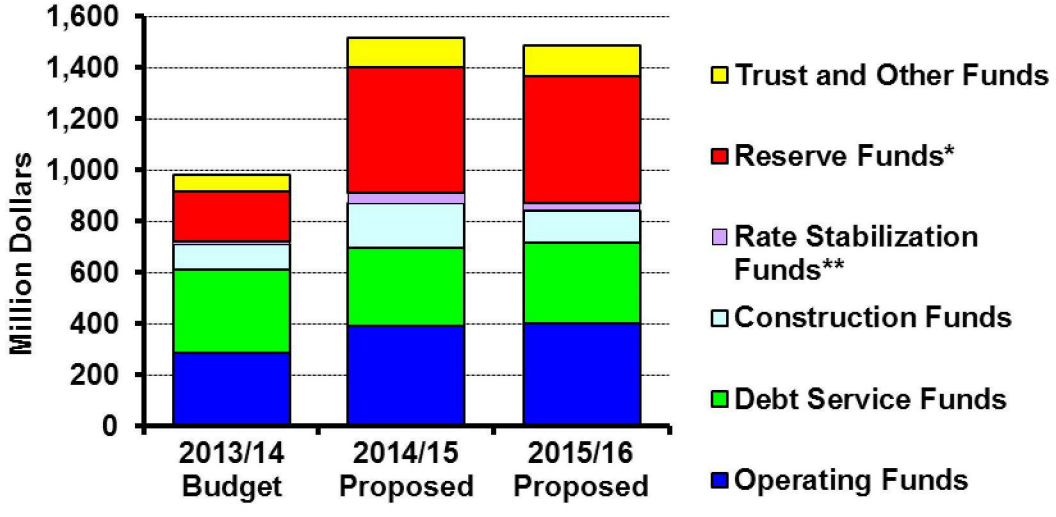
On June 30, 2016, the minimum and target reserve fund targets are estimated to be $205.4 million and $489.6 million, respectively. Based on projected revenues and expenditures, it is estimated that the balance in the WRSF and Revenue Remainder Fund will total about $495.3 million, about $5.7 million over the target.

Table 5. Projected Fund Balances (dollars in millions)

	Restricted		Unrestricted		
	Contractual	Board	Designated	Undesignated	Total
2014/15 Proposed					
Operating Funds	173.4	216.4	-	-	389.8
Debt Service Funds	309.0	-	-	-	309.0
Construction Funds	18.4	-	153.5	-	171.9
Reserve Funds*	-	-	-	490.5	490.5
Rate Stabilization Funds**	-	-	38.8	-	38.8
Trust and Other Funds	67.0	50.1	-	0.9	118.0
Total June 30, 2015	**567.7**	**266.5**	**192.3**	**491.4**	**1,518.0**
2015/16 Proposed					
Operating Funds	179.1	222.4	-	-	401.5
Debt Service Funds	314.8	-	-	-	314.8
Construction Funds	18.9	-	106.7	-	125.6
Reserve Funds*	-	-	-	495.3	495.3
Rate Stabilization Funds**	-	-	30.5	-	30.5
Trust and Other Funds	67.0	50.1	-	0.9	118.0
Total June 30, 2016	**579.8**	**272.5**	**137.1**	**496.2**	**1,485.7**

Based on modified accrual accounting.
Totals may not foot due to rounding.
* includes Water Rate Stabilization Fund and Revenue Remainder Fund.
** includes Water Stewardship Fund and Treatment Surcharge Stabilization Fund

Figure 6. Fund Distribution by Type



* includes Water Rate Stabilization Fund and Revenue Remainder Fund.
** includes Water Stewardship Fund and Treatment Surcharge Stabilization Fund

Table 6. Sources and Uses of Funds (dollars in millions)

	2013/14 Budget	2013/14 Projected	2014/15 Proposed	2015/16 Proposed	2014/15 Proposed Compared to 2013/14 Budget	2015/16 Proposed Compared to 2014/15 Proposed
USES OF FUNDS						
Expenses						
State Water Contract	$ 564.0	$ 426.0	$ 495.7	$ 515.0	$ (68.3)	$ 19.3
Supply Programs	37.0	76.5	65.5	66.5	28.5	0.9
Colorado River Power	24.9	24.9	29.2	36.5	4.3	7.3
Debt Service	343.4	369.0	325.8	324.7	(17.6)	(1.1)
Demand Management	53.6	53.6	62.2	61.7	8.5	(0.5)
Departmental O&M	326.3	336.1	359.7	363.3	33.4	3.6
Treatment Chemicals, Solids & Power	26.4	26.4	26.6	27.6	0.2	1.1
Other O&M	37.5	128.0	27.5	26.6	(10.0)	(0.8)
Sub-total Expenses	**1,413.3**	**1,440.6**	**1,392.1**	**1,421.9**	**(21.1)**	**29.8**
Capital Investment Plan	**294.6**	**200.0**	**245.4**	**267.9**	**(49.2)**	**22.5**
Fund Deposits						
Water Transfer Fund	-	95.0	-	-	-	-
R&R and General Fund	125.0	225.0	245.4	221.0	120.4	(24.4)
Revenue Bond Construction	2.9	-	-	-	(2.9)	-
Water Stewardship Fund	0.3	14.1	-	-	(0.3)	-
Treatment Surcharge Stabilization Fund	-	-	-	0.4	-	0.4
Interest for Construction & Trust Funds	0.9	0.2	0.1	0.4	(0.8)	0.3
Increase in Required Reserves	28.2	8.6	9.9	18.2	(18.3)	8.3
Increase in Water Rate Stabilization Fund	-	-	-	4.3	-	4.3
Sub-total Fund Deposits	**157.3**	**342.9**	**255.5**	**244.3**	**98.1**	**(11.1)**
TOTAL USES OF FUNDS	**$ 1,865.2**	**$ 1,983.5**	**$ 1,893.0**	**$ 1,934.1**	**$ 27.8**	**$ 41.1**
SOURCES OF FUNDS						
Revenues						
Taxes	$ 80.1	$ 81.1	$ 90.2	$ 92.2	$ 10.1	$ 2.0
Annexations	1.0	-	-	-	(1.0)	-
Interest Income	14.1	7.7	16.2	27.9	2.1	11.7
Hydro Power	20.9	17.0	19.3	18.9	(1.7)	(0.4)
Fixed Charges (RTS & Capacity Charge)	182.1	182.1	199.5	198.8	17.4	(0.7)
Water Sales Revenue	1,240.7	1,437.5	1,290.0	1,308.4	49.2	18.4
Miscellaneous Revenue	6.1	6.1	10.2	11.3	4.1	1.1
Bond Proceeds and Reimbursements	178.6	-	-	-	(178.6)	-
Sub-total Revenues	**1,723.7**	**1,731.7**	**1,625.4**	**1,657.5**	**(98.4)**	**32.1**
Fund Withdrawals						
R&R and General Fund	125.0	130.0	245.4	267.9	120.4	22.5
Bond Funds for Construction	-	70.0	-	-	-	-
Water Stewardship Fund	-	-	9.5	8.8	9.5	(0.7)
Treatment Surcharge Stabilization Fund	-	0.5	4.4	-	4.4	(4.4)
Decrease in Required Reserves	1.5	-	-	-	(1.5)	-
Decrease in Water Rate Stabilization Fund	14.9	51.3	8.4	-	(6.6)	(8.4)
Sub-total Fund Withdrawals	**141.5**	**251.8**	**267.6**	**276.6**	**126.1**	**9.0**
TOTAL SOURCES OF FUNDS	**$ 1,865.2**	**$ 1,983.5**	**$ 1,893.0**	**$ 1,934.1**	**$ 27.8**	**$ 41.1**

Totals may not foot due to rounding.

Table 7. June 30, 2015 Sources and Uses by Fund (dollars in millions)

Fiscal Year Ending June 30th, 2015 ($ in Millions)	All Funds	Operating Funds							Debt Service Funds	Stabilization Funds		Reserve Funds (1)	Construction Funds		Trust & Other Funds
		General	Water Revenue	O&M	Water Standby	Water Transfer	Self-Insured Retention	State Contract		Water Stewardship	Water Treatment Surcharge Stab.		R&R	Revenue Bond Construction	
Beginning of Year Balance	**1,530.1**	**117.0**	**-**	**169.2**	**0.6**	**119.9**	**24.9**	**68.2**	**323.1**	**48.2**	**4.4**	**496.1**	**153.5**	**4.0**	**0.9**
USES OF FUNDS															
Expenses															
State Water Contract	495.7	-	-	360.8	-	-	-	134.9	-	-	-	-	-	-	-
Supply Programs	65.5	-	-	65.5	-	-	-	-	-	-	-	-	-	-	-
Colorado River Power	29.2	-	-	29.2	-	-	-	-	-	-	-	-	-	-	-
Debt Service	325.8	1.3	-	3.9	-	-	-	-	320.7	-	-	-	-	-	-
Demand Management	62.2	-	-	62.2	-	-	-	-	-	-	-	-	-	-	-
Departmental O&M	359.7	-	-	359.7	-	-	-	-	-	-	-	-	-	-	-
Treatment Chemicals, Sludge & Power	26.6	-	-	26.6	-	-	-	-	-	-	-	-	-	-	-
Other O&M	27.5	7.6	-	19.8	-	-	-	-	-	-	-	-	-	-	-
Sub-total Expenses	**1,392.1**	**8.9**	**-**	**927.6**	**-**	**-**	**-**	**134.9**	**320.7**	**-**	**-**	**-**	**-**	**-**	**-**
Capital Investment Plan	**245.4**	**15.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**229.8**	**-**	**-**
Fund Deposits															
R&R and General Fund	245.4	15.7	-	-	-	-	-	-	-	-	-	-	229.8	-	-
Revenue Bond Construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Stewardship Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Treatment Surcharge Stabilization Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest for Construction & Trust Funds	0.1	-	-	-	-	-	-	-	-	-	-	-	-	0.1	0.0
Increase in Required Reserves	9.9	-	-	4.2	-	-	-	2.8	0.1	-	-	2.8	-	-	-
Increase in Rate Stabilization Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total Fund Deposits	**255.5**	15.7	-	4.2	-	-	-	2.8	0.1	-	-	2.8	229.8	0.1	0.0
TOTAL USES OF FUNDS	**1,893.0**	**40.2**	**-**	**931.8**	**-**	**-**	**-**	**137.7**	**320.8**	**-**	**-**	**2.8**	**459.5**	**0.1**	**0.0**
SOURCES OF FUNDS															
Revenues															
Taxes	90.2	-	-	-	-	-	-	67.0	23.2	-	-	-	-	-	-
Annexations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Income	16.2	1.3	-	2.0	0.0	1.4	0.3	0.8	3.6	0.5	0.0	4.4	1.8	0.1	0.0
Hydro Power	19.3	-	19.3	-	-	-	-	-	-	-	-	-	-	-	-
Fixed Charges (RTS & Capacity Charge)	199.5	-	199.5	-	-	-	-	-	-	-	-	-	-	-	-
Water Sales Revenue	1,290.0	-	1,290.0	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous Revenue	10.2	10.2	-	-	-	-	-	-	-	-	-	-	-	-	-
Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total Revenues	**1,625.4**	**11.6**	**1,508.8**	**2.0**	**0.0**	**1.4**	**0.3**	**67.8**	**26.7**	**0.5**	**0.0**	**4.4**	**1.8**	**0.1**	**0.0**
Fund Withdrawals															
Transfer Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R&R and General Fund	245.4	15.7	-	-	-	-	-	-	-	-	-	-	229.8	-	-
Bond Funds for Construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Stewardship Fund	9.5	-	-	-	-	-	-	-	-	9.5	-	-	-	-	-
Treatment Surcharge Stabilization Fund	4.4	-	-	-	-	-	-	-	-	-	4.4	-	-	-	-
Decrease in Required Reserves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Decrease in Rate Stabilization Fund	8.4	-	-	-	-	-	-	-	-	-	-	8.4	-	-	-
Sub-total Fund Withdrawals	**267.6**	**15.7**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**9.5**	**4.4**	**8.4**	**229.8**	**-**	**-**
TOTAL SOURCES OF FUNDS	**1,893.0**	**27.2**	**1,508.8**	**2.0**	**0.0**	**1.4**	**0.3**	**67.8**	**26.7**	**10.0**	**4.4**	**12.7**	**231.5**	**0.1**	**0.0**
Inter-Fund Transfers	**-**	**13.0**	**(1,508.8)**	**929.8**	**(0.0)**	**(1.4)**	**(0.3)**	**69.9**	**279.8**	**(10.0)**	**(4.4)**	**(9.9)**	**228.0**	**14.2**	**-**
End of Year Balance	**1,518.0**	**117.0**	**-**	**173.4**	**0.6**	**119.9**	**24.9**	**71.0**	**309.0**	**38.8**	**0.0**	**490.5**	**153.5**	**18.4**	**0.9**

Totals may not foot due to rounding

(1) Includes Water Rate Stabilization Fund and Revenue Remainder Fund

Table 8. June 30, 2016 Sources and Uses by Fund (dollars in millions)

Fiscal Year Ending June 30th, 2016 ($ in Millions)	All Funds	Operating Funds							Debt Service Funds	Stabilization Funds		Reserve Funds (1)	Construction Funds		Trust & Other Funds
		General	Water Revenue	O&M	Water Standby	Water Transfer	Self-Insured Retention	State Contract		Water Stewardship	Water Treatment Surcharge Stab.		R&R	Revenue Bond Construction	
Beginning of Year Balance	**1,518.0**	**117.0**	**-**	**173.4**	**0.6**	**119.9**	**24.9**	**71.0**	**309.0**	**38.8**	**0.0**	**490.5**	**153.5**	**18.4**	**0.9**
USES OF FUNDS															
Expenses															
State Water Contract	515.0	-	-	373.7	-	-	-	141.3	-	-	-	-	-	-	-
Supply Programs	66.5	-	-	66.5	-	-	-	-	-	-	-	-	-	-	-
Colorado River Power	36.5	-	-	36.5	-	-	-	-	-	-	-	-	-	-	-
Debt Service	324.7	1.3	-	3.7	-	-	-	-	319.7	-	-	-	-	-	-
Demand Management	61.7	-	-	61.7	-	-	-	-	-	-	-	-	-	-	-
Departmental O&M	363.3	-	-	363.3	-	-	-	-	-	-	-	-	-	-	-
Treatment Chemicals, Sludge & Power	27.6	-	-	27.6	-	-	-	-	-	-	-	-	-	-	-
Other O&M	26.6	8.2	-	18.4	-	-	-	-	-	-	-	-	-	-	-
Sub-total Expenses	**1,421.9**	**9.5**	**-**	**951.4**	**-**	**-**	**-**	**141.3**	**319.7**	**-**	**-**	**-**	**-**	**-**	**-**
Capital Investment Plan	**267.9**	**12.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**255.3**	**-**	**-**
Fund Deposits															
R&R and General Fund	221.0	12.5	-	-	-	-	-	-	-	-	-	-	208.5	-	-
Revenue Bond Construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Stewardship Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Treatment Surcharge Stabilization Fund	0.4	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-
Interest for Construction & Trust Funds	0.4	-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.0
Increase in Required Reserves	18.2	-	-	5.7	-	-	-	6.0	6.0	-	-	0.5	-	-	-
Increase in Rate Stabilization Fund	4.3	-	-	-	-	-	-	-	-	-	-	4.3	-	-	-
Sub-total Fund Deposits	**244.3**	12.5	-	5.7	-	-	-	6.0	6.0	-	0.4	4.8	208.5	0.4	0.0
TOTAL USES OF FUNDS	**1,934.1**	**34.5**	**-**	**957.1**	**-**	**-**	**-**	**147.3**	**325.7**	**-**	**0.4**	**4.8**	**463.8**	**0.4**	**0.0**
SOURCES OF FUNDS															
Revenues															
Taxes	92.2	-	-	-	-	-	-	68.9	23.3	-	-	-	-	-	-
Annexations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Income	27.9	2.4	-	3.6	0.0	2.4	0.5	1.5	6.2	0.7	0.0	7.7	2.6	0.4	0.0
Hydro Power	18.9	-	18.9	-	-	-	-	-	-	-	-	-	-	-	-
Fixed Charges (RTS & Capacity Charge)	198.8	-	198.8	-	-	-	-	-	-	-	-	-	-	-	-
Water Sales Revenue	1,308.4	-	1,308.4	-	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous Revenue	11.3	11.3	-	-	-	-	-	-	-	-	-	-	-	-	-
Bond Proceeds	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total Revenues	**1,657.5**	**13.6**	**1,526.0**	**3.6**	**0.0**	**2.4**	**0.5**	**70.4**	**29.5**	**0.7**	**0.0**	**7.7**	**2.6**	**0.4**	**0.0**
Fund Withdrawals															
Transfer Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R&R and General Fund	267.9	12.5	-	-	-	-	-	-	-	-	-	-	255.3	-	-
Bond Funds for Construction	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Water Stewardship Fund	8.8	-	-	-	-	-	-	-	-	8.8	-	-	-	-	-
Treatment Surcharge Stabilization Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Decrease in Required Reserves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Decrease in Rate Stabilization Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sub-total Fund Withdrawals	**276.6**	**12.5**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**8.8**	**-**	**-**	**255.3**	**-**	**-**
TOTAL SOURCES OF FUNDS	**1,934.1**	**26.2**	**1,526.0**	**3.6**	**0.0**	**2.4**	**0.5**	**70.4**	**29.5**	**9.5**	**0.0**	**7.7**	**258.0**	**0.4**	**0.0**
Inter-Fund Transfers	**-**	**8.3**	**(1,526.0)**	**953.5**	**(0.0)**	**(2.4)**	**(0.5)**	**76.9**	**296.1**	**(9.5)**	**0.4**	**(2.9)**	**205.8**	**0.2**	**-**
End of Year Balance	**1,485.7**	**117.0**	**-**	**179.1**	**0.6**	**119.9**	**24.9**	**77.0**	**314.8**	**30.0**	**0.5**	**495.3**	**106.7**	**18.9**	**1.0**

Totals may not foot due to rounding

(1) Includes Water Rate Stabilization Fund and Revenue Remainder Fund

Metropolitan Water District of Southern California

Fiscal Year 2014/15 Cost of Service Option 1

April2014

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List of Schedules and Tables

1 Cost of Service

Prior to discussing the specific rates and charges that make up the rate structure, it is important to understand the cost of service process that supports the rates and charges. The purpose of the cost of service process is to: (1) identify which costs should be recovered through rates and charges; (2) organize Metropolitan's costs into service functions; (3) classify service function costs on the basis for which the cost was incurred; and (4) allocate costs to rate elements. The purpose of sorting Metropolitan's costs in a manner that reflects the type of service provided (e.g., supply vs. conveyance), the characteristics of the cost (e.g., fixed or variable) and the reason why the cost was incurred (e.g., to meet peak or average demand) is to create logical cost of service "building blocks". The building blocks can then be arranged to design rates and charges with a reasonable nexus between costs and benefits.

1.1 Cost of Service Process

The general cost of service process involves the four basic steps outlined below.

Step 1 - Development Of Revenue Requirements

In the revenue requirement step, the costs that Metropolitan must recover through rates and charges, after consideration of revenue offsets, are identified. The cash needs approach, an accepted industry practice for government-owned utilities, has historically been used in identifying Metropolitan's revenue requirements and was applied for the purposes of this study. Under the cash needs approach, revenue requirements include operating costs and annual requirements for meeting financed capital items (debt service, funding of replacement and refurbishment from operating revenues, etc.).

Step 2 – Identification Of Service Function Costs

In the functional allocation step, revenue requirements are allocated to different categories based on the operational functions served by each cost. The functional categories are identified in such a way as to allow the development of logical allocation bases. The functional categories used in the cost of service process include:

- Supply
- Conveyance and Aqueduct
- Storage
- Treatment
- Distribution
- Demand Management
- Administrative and General
- Hydroelectric

In order to provide more finite functional allocation, many of these functional categories are subdivided into more detailed sub-functions in the cost of service process. For example, costs for the Supply and Conveyance and Aqueduct functions are further subdivided into the sub-functions State Water Project (SWP), Colorado River Aqueduct (CRA), and Other. Similarly, costs in the Storage function are broken down into the sub-functions Emergency Storage, Drought Carryover Storage, and Regulatory Storage.

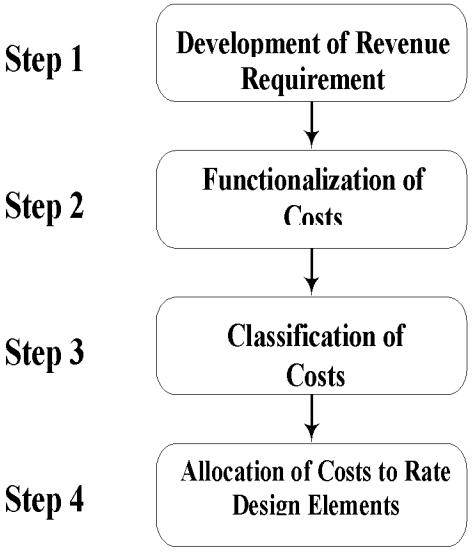
Step 3 - Classification Of Costs

In the cost classification step, functionalized costs are separated into categories according to their causes and behavioral characteristics. Proper cost classification is critical in developing a rate structure that recovers costs in a manner consistent with the causes and behaviors of those costs. Under American Water Works Association (AWWA) guidelines, cost classification may be done using either the Base/Extra-Capacity approach or the Commodity/Demand approach. In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Step 4 - Allocation Of Costs To Rate Design Elements

The allocation of costs to the rate design elements depends on the purpose for which the cost was incurred and the manner in which the member agencies use the Metropolitan system. For example, costs incurred to meet average system demands are typically recovered by dollar per acre-foot rates and are allocated based on the volume of water purchased by each agency. Rates that are levied on the amount or volume of water delivered are commonly referred to as volumetric rates as the customer's costs vary with the volume of water purchased. Costs incurred to meet peak distribution demands (referred to in this report as demand costs) are recovered through a peaking charge (the Capacity Charge) and are allocated to agencies based on their peak summer demand behavior. Costs incurred to provide standby service in the event of an emergency are referred to here as standby costs. Differentiating between costs for average usage and peak usage is just one example of how the cost of service process allows for the design of rates and charges that improves overall customer equity and efficiency. Figure 1 summarizes the cost of service process.

Figure 1. The Cost of Service Process



1.2 Revenue Requirements

The estimated revenue requirements presented in this report are for FY 2014/15. Throughout the report, FY 2014/15 is used as the "test year" to demonstrate the application of the cost of service process. Schedule 1 summarizes the FY 2014/15 revenue requirement by the major budget line items used in Metropolitan's budgeting process. Current estimates indicate Metropolitan's annual expenditures (including capital financing costs, but not construction outlays financed with bond proceeds, if any) will total approximately $1.647 billion in FY 2014/15.

The rates and charges do not have to cover this entire amount. Metropolitan generates a significant amount of revenue from interest income, hydroelectric power sales and miscellaneous income. These internally generated revenues are referred to as revenue offsets and are expected to generate about $46 million in FY 2014/15. It is expected that Metropolitan will also generate about $90 million in ad valorem property tax revenues (assuming that ad valorem tax rates are maintained at 0.0035% of assessed valuation). Property tax revenues are used to pay for a portion of Metropolitan's general obligation bond debt service, and a portion of Metropolitan's obligation to pay for debt service on bonds issued to fund the State Water Project (SWP), and other SWP costs. The total revenue offsets for FY 2014/15 are estimated to be around $136 million. Therefore, the revenue required from rates and charges is the difference between the total costs and the revenue offsets, or $1.512 billion. Given an effective date of January 1, 2015, the rates and charges recommended in this report, combined with rates and charges effective through December 31, 2014 will generate a total of $1.489 billion in 2014/15.

All of Metropolitan's costs fall under the broad categories of Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific organizational groups. General District Requirements consist of requirements associated with the Colorado River

Aqueduct (CRA), SWP, the capital financing costs associated with the Capital Investment Plan (CIP), and Water Management Programs. General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code.

When considered in total, General District Requirements make up approximately 71 percent of the absolute value of the allocated costs. The largest component of the revenue requirement relates tothe capital financing program at $571 million, which makes up approximately 32 percent of Metropolitan's FY 2015/16 revenue requirements. Capital financing costs include pay-as-you-go funding of the CIP at $245 million. Metropolitan's SWP costs is the second largest component of the revenue requirement at $496 million, constituting approximately 28 percent of the revenue requirement. Metropolitan's SWP contract requires Metropolitan to pay its allocated share of the capital, minimum operations, maintenance, power and replacement costs incurred to develop and convey its water supply entitlement, irrespective of the quantity of water Metropolitan takes delivery of in any given year. Departmental O&M costs at $386 million make up 22 percent of the total revenue requirement in FY 2014/15. Water System Operations is the largest single component of the Departmental Costs and accounts for 12 percent of the revenue requirements. Water System Operations responsibilities include operating and maintaining Metropolitan's pumping, storage, treatment, and hydroelectric facilities, as well as the CRA and other conveyance and supply facilities.

Schedule 1. Revenue Requirements (by budget line item)

	Fiscal Year Ending 2015	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of the General Manager & Human Resources	$ 25,604,438	1.4%
External Affairs	17,056,198	1.0%
Water System Operations	212,855,716	11.9%
Chief Financial Officer	8,956,070	0.5%
Business Technology & Engineering Services	83,901,805	4.7%
Real Property Development & Mgmt	5,307,024	0.3%
Water Resource Management	16,328,333	0.9%
Ethics Department	992,272	0.1%
General Counsel	12,369,676	0.7%
Audit Department	2,877,181	0.2%
Total	**386,248,712**	**21.7%**
General District Requirements		
State Water Project	495,708,877	27.8%
Colorado River Aqueduct Power	29,178,396	1.6%
Supply Programs	65,524,620	3.7%
Demand Management	62,160,118	3.5%
Capital Financing Program	571,258,865	32.0%
Operating Equipment and Leases	27,462,998	1.5%
Increase (Decrease) in Required Reserves	9,900,000	0.6%
Total	**1,261,193,874**	**70.7%**
Revenue Offsets	**(135,791,692)**	**7.6%**
Net Revenue Requirements	**$ 1,511,650,894**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
Totals may not foot due to rounding

1.3 Service Function Costs

Several major service functions result in the delivery of water to Metropolitan's member agencies. These include the supply itself, the conveyance capacity and energy used to move the supply, storage of water, distribution of supplies within Metropolitan's system, and treatment of these supplies. Metropolitan's rate structure recovers the majority of the cost of providing these functions through rates and charges.

The functional categories developed for Metropolitan's cost of service process are consistent with the AWWA rate setting guidelines, a standard chart of accounts for utilities developed by the National Association of Regulatory Utility Commissioners (NARUC), and the National Council of Governmental Accounting. Because all water utilities are not identical, the rate structure reflects Metropolitan's unique physical, financial, and institutional characteristics, as permitted under the AWWA guidelines.

A key goal of functional allocation is to maximize the degree to which rates and charges reflect the costs of providing different types of service. For functional allocation to be of maximum benefit, two criteria must be kept in mind when establishing functional categories.

- The categories should correlate charges for different types of service with the costs of providing those different types of service; and
- Each function should include reasonable allocation bases by which costs may be allocated.

Each of the functions developed for the cost of service process is described below.

- *Supply.* This function includes costs for those SWP and CRA facilities and programs that relate to maintaining and developing supplies to meet the member agencies' demands. For example, Metropolitan's supply related costs include investments in the Conservation Agreement with the Imperial Irrigation District and the Palo Verde Irrigation District (PVID) Program from the Colorado River supply programs. The SWP programs include transfer programs such as Kern Delta Program, Semitropic Water Storage Program, Yuba Accord Program, and the Arvin-Edison Water Storage Program. Costs for in-basin programs within Metropolitan's service area, such as Conjunctive Use Programsare also included.
- *Conveyance and Aqueduct.* This function includes the capital, operations, maintenance, and overhead costs for SWP and CRA facilities that convey water through Metropolitan's internal distribution system. Variable power costs for the SWP and CRA are also considered to be Conveyance and Aqueduct costs but are separately reported under a "power" sub-function. Conveyance and Aqueduct facilities can be distinguished from Metropolitan's other facilities primarily by the fact that they do not typically include direct connections to the member agencies. For purposes of this study, the Inland Feeder Project functions as an extension of the SWP East Branch and is therefore considered a Conveyance and Aqueduct facility as well.
- *Storage.* Storage costs include the capital financing, operating, maintenance, and overhead costs for Diamond Valley Lake, Lake Mathews, Lake Skinner, and five smaller regulatory reservoirs within the distribution system. Metropolitan's larger storage facilities are operated to provide: (1) emergency storage in the event of an earthquake or similar system outage; (2) drought storage that produces additional supplies during times of shortage; and (3) regulatory storage to balance system demands and supplies and provide for operating

flexibility. To reasonably allocate the costs of storage capacity among member agencies, the storage service function is categorized into sub-functions of emergency, drought, and regulatory storage.

- *Treatment.* This function includes capital financing, operating, maintenance, and overhead costs for Metropolitan's five treatment plants and is considered separately from other costs so that treated water service may be priced separately.
- *Distribution.* This function includes capital financing, operating, maintenance, and overhead costs for the "in-basin" feeders, canals, pipelines, laterals, and other appurtenant works. The "in-basin" facilities are distinguished from Conveyance and Aqueduct facilities at the point of connection to the SWP, Lake Mathews, and other major turnouts along the CRA facilities.
- *Demand Management.* A separate demand management service function has been usedto clearly identify the cost of Metropolitan's investments in local resources like conservation, recycling, and desalination.
- *Administrative and General (A&G).* These costs occur in each of the Groups' departmental budgets and reflect overhead costs that cannot be directly functionalized. The cost-of-service process allocates A&G costs to the service functions based on the labor costs of non-A&G dollars allocated to each function.
- *Hydroelectric.* Hydroelectric costs include the capital financing, operating, maintenance, and overhead costs incurred to operate the 16 small hydroelectric plants located throughout the water distribution system.

1.3.1 Functional Allocation Bases

The functional allocation bases are used to allocate costs to the various service functions. The primary functional allocation bases used in the cost-of-service process are listed below.

- Direct assignment
- Net Book Value plus Work-In-Progress
- Prorating in proportion to other allocations
- Manager analysis
- Prior year results

Schedule 2 summarizes the amounts of total cost allocated using each of the above types of allocation bases.

Schedule 2. Summary of Functional Allocations by Type of Allocation Basis

Primary Functional Allocation Bases	Estimated for FY 2015	% of Allocated Dollars
Direct Assignment	$ 915,417,554	51.3%
Net Book Value/Work in Progress	616,268,845	34.6%
Prorating	75,657,552	4.2%
Manager Analysis	35,097,356	2.0%
Prior-Year Results	75,268,351	4.2%
Other	$ 65,524,620	3.7%
Total Dollars Allocated	**$ 1,783,234,277**	**100.0%**
Portion of Above Allocations Relating to:		
Revenue Requirements before Offsets	1,647,442,586	
Revenue Offsets	135,791,692	
Total Dollars Allocated	**$ 1,783,234,277**	

Totals may not foot due to rounding

Each of the primary allocation bases is discussed in detail in the remainder of this section. Discussion of each allocation basis includes examples of costs allocated using that particular basis.

(a) Direct assignment

Direct assignment makes use of a clear and direct connection between a revenue requirement and the function being served by that revenue requirement. Directly assigned costs typically include: Costs associated with specific treatment plants, purely administrative costs, and certain distribution and conveyance departmental costs. Examples of costs that are directly assigned to specific functional categories are given below.

* Water System Operations Group departmental costs for treatment plants are directly assigned to treatment.
* Transmission charges for State Water Contract are directly assigned to conveyance SWP.

(b) Net Book ValuePlus Work-In-Progress

Capital financing costs, including debt service and funding replacements and refurbishments from operating revenues, comprise about 32percent of Metropolitan's annual revenue requirements. One approach would be to allocate payments on each debt issue in direct proportion to specific project expenditures made using bond proceeds. But, this approach would result in a high degree of volatility in relative capital cost allocations from year to year.
The approach used in this analysis is one widely used in water industry cost of service studies. Capital and debt-related costs (including repair and replacement costs paid from current revenues) are allocated on the basis of the relative net book values of fixed assets plus work in progress for assets under construction within each functional category. This approach produces capital cost allocations that are consistent with the functional distribution of assets. Also, since the allocation basis is tied to fixed asset records rather than debt payment records, the resulting allocations are more reflective of the true useful lives of assets. Use of net book values as an allocation basis provides an improved matching of functional costs with asset lives. A listing of fixed asset net book values summarized by asset function is shown in Schedule 3.

Schedule 3. Net Book Value and Work in Progress Allocation Base

Functional Categories	NBV for FY 2015	% of Total NBV
Source of Supply	$ 30,700,042	0.4%
Conveyance & Aqueduct	1,821,106,630	21.4%
Storage	2,163,558,220	25.4%
Treatment	2,640,203,625	31.0%
Distribution	1,415,131,452	16.6%
Administrative & General	324,056,000	3.8%
Hydroelectric	133,033,516	1.6%
Total Fixed Assets Net Book Value	**$ 8,527,789,487**	**100.0%**

Totals may not foot due to rounding

In most instances, the cost-of-service process uses net book value*plus* work-in-progress to develop allocation bases for debt and capital costs. Examples of revenue requirements allocated using these net book valueand work-in-progress allocations are shown below.

* Revenue Bond Debt Service: *allocated using Net Book Value plus Work In Progress.*
* Annual deposit of operating revenue to replacement and refurbishment fund: *allocated using Net Book Value plus Work In Progress.*

To calculate the relative percentage of fixed assets in each functional category, Metropolitan staff conducted a detailed analysis of historical accounting records and built a database of fixed asset accounts that contains records for all facilities currently in service and under construction. Each facility was sorted into the major service function that best represented the facilities primary purpose and was then further categorized into the appropriate sub-functions described earlier.

(c) Prorating in proportion to other allocations

Utility cost of service studies frequently contain line items for which it would be difficult to identify an allocation basis specific to that line item. In these cases, the most logical allocation basis is often a prorata blend of allocation results calculated for other revenue requirements in the same departmental group, or general category. Reasonable prorata allocations are based on a logical nexus between a cost and the purpose which it serves. For example: Human Resources Section costs are allocated using all labor costs, since Human Resources spends its time and resources attending to the labor force.

(d) Manager analyses

The functional interrelationships of some organizational units are so complex and/or dynamic that reliable allocation bases can only be developed with extensive input from the organization's managers. In these cases, managers use their firsthand knowledge of the organization's internal operations to generate a functional analysis of departmental costs. For example, Fleet Services Unit costs are allocated to treatment, storage, conveyance and distribution based on vehicle count by location.

(e) Prior year results

If available, accounting data for the prior fiscal year by appropriation are used to functionalize Departmental O&M costs for several units or sections. Many of the appropriations parallel the service functions used in the cost of service. For example, Conveyance and Distribution Section costs are allocated to distribution, hydroelectric, and conveyance functions based on the prior year accounting data by appropriation.

A summary of the functional allocation results is shown in Schedules 4 and 5. Schedule 4 provides a breakdown of the revenue requirement for FY 2014/15 into the major service functions and sub-functions prior to the redistribution of administrative and general costs. Schedule 5 serves as a cross-reference summarizing how the budget line items are distributed among the service functions. The largest functional component of Metropolitan's revenue requirement is the Conveyance and Aqueduct function, which constitutes approximately 36 percent of the allocated revenue requirement.

Schedule 4. Revenue Requirement (by service function)

Functional Categories	Fiscal Year Ending 2015	% of Allocated Dollars (1)
Source of Supply		
CRA	$ 47,180,634	3.1%
SWP	101,115,906	6.7%
Other Supply	11,763,099	0.8%
Total	**160,059,639**	**10.5%**
Conveyance & Aqueduct		
CRA		
CRA Power (net of sales)	42,781,561	2.8%
CRA All Other	53,100,271	3.5%
SWP		
SWP Power	184,409,292	12.1%
SWP All Other	175,798,675	11.6%
Other Conveyance & Aqueduct	97,995,986	6.4%
Total	**554,085,785**	**36.5%**
Storage		
Storage Costs Other Than Power		
Emergency	74,871,510	4.9%
Drought	62,999,153	4.1%
Regulatory	18,717,463	1.2%
Wadsworth plant pumping/generation	(1,425,574)	0.1%
Total	**155,162,552**	**10.4%**
Treatment		
Jensen	62,086,670	4.1%
Weymouth	61,590,844	4.1%
Diemer	61,456,795	4.0%
Mills	32,206,302	2.1%
Skinner	69,892,621	4.6%
Total	**287,233,232**	**18.9%**
Distribution	162,342,445	10.7%
Demand Management	72,654,176	4.8%
Hydroelectric	(2,656,874)	0.2%
Administrative & General	122,769,939	8.1%
Total Functional Allocations:	**$ 1,511,650,894**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
Totals may not foot due to rounding

Schedule 5. Service Function Revenue Requirements (by budget line item)

Fiscal Year Ending 2015	Source of Supply	Conveyance & Aqueduct	Storage	Water Quality	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total $ Allocated
Departmental Operations & Maintenance										
Office of the General Manager & Human Resources	$ 1,207,446	$ 8,890,537	$ 804,377	$ -	$ 4,405,392	$ 3,016,462	$ 371,837	$ 293,525	$ 6,614,861	$ 25,604,438
External Affairs	-	-	-	-	-	-	2,899,604	-	14,156,594	17,056,198
Water System Operations	12,395,861	37,908,946	3,483,044	-	96,038,409	56,738,335	8,181	5,343,427	939,514	212,855,716
Chief Financial Officer	-	-	-	-	-	-	-	-	8,956,070	8,956,070
Business Technology & Engineering Services	2,452,792	10,624,123	9,094,017	-	17,749,543	10,786,617	722,436	1,033,366	31,438,910	83,901,805
Real Property Development & Mgmt	-	-	5,307,024	-	-	-	-	-	-	5,307,024
Water Resource Management	9,374,492	-	-	-	128,794	1,152,536	5,479,140	-	193,370	16,328,333
Ethics Department	-	-	-	-	-	-	-	-	992,272	992,272
General Counsel	-	-	-	-	-	-	-	-	12,369,676	12,369,676
Audit Department	-	-	-	-	-	-	-	-	2,877,181	2,877,181
Total Departmental O&M	25,430,591	57,423,606	18,688,462	-	118,322,138	71,693,950	9,481,199	6,670,318	78,538,449	386,248,712
General District Requirements										
State Water Project	78,539,665	417,169,212	-	-	-	-	-	-	-	495,708,877
Colorado River Aqueduct Power	-	29,178,396	-	-	-	-	-	-	-	29,178,396
Supply Programs	65,524,620	-	-	-	-	-	-	-	-	65,524,620
Demand Management	-	-	-	-	-	-	62,160,118	-	-	62,160,118
Capital Financing Program	1,973,149	117,045,904	139,055,904	-	176,861,745	106,944,172	-	8,550,311	20,827,681	571,258,865
Other Operating Costs	581,869	1,181,728	387,630	-	2,122,962	1,453,636	1,729,189	141,450	19,864,534	27,462,998
Increase (Decrease) in Required Reserves	-	-	-	-	-	-	-	-	9,900,000	9,900,000
Total General District Requirements	146,619,303	564,575,240	139,443,534	-	178,984,707	108,397,807	63,889,306	8,691,761	50,592,215	1,261,193,874
Revenue Offsets	(11,990,254)	(67,913,062)	(2,969,444)	-	(10,073,613)	(17,749,312)	(716,329)	(18,018,953)	(6,360,725)	(135,791,692)
Net Revenue Requirements	**$ 160,059,639**	**$ 554,085,785**	**$ 155,162,552**	**$ -**	**$ 287,233,232**	**$ 162,342,445**	**$ 72,654,176**	**$ (2,656,874)**	**$ 122,769,939**	**$ 1,511,650,894**

Totals may not foot due to rounding

1.4 Classified Costs

In the cost classification step, functionalized costs are further categorized based on the causes and behavioral characteristics of these costs. An important part of the classification process is identifying which costs are incurred to meet average demands vs. peak demands and which costs are incurred to provide standby service. As with the functional allocation process, the proposed classification process is consistent with AWWA guidelines, but has been tailored to meet Metropolitan's specific operational structure and service environment.

Two methods are discussed in the AWWA M1 Manual, Principles of Water Rates, Fees and Charges. These two methods are the Commodity/Demand method and the Base/Extra Capacity method.

In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand method allocates costs that vary with the amount of water produced to the commodity category with all other costs associated with water production allocated to the demand category. In the Base/Extra Capacity method, costs related to average demand conditions are allocated to the base category, and capacity costs associated with meeting above average demand conditions are allocated to the extra capacity category.

The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Classification categories used in the analysis include:

- Fixed demand costs
- Fixed commodity costs
- Fixed standby costs
- Variable commodity costs
- Hydroelectric costs

Demand costs are incurred to meet peak demands. Only the direct capital financing costs were included in the demand classification category. A portion of capital financing costs was included in the demand cost category because in order to meet peak demands additional physical capacity is designed into the system and, therefore, additional capital costs are incurred. Commodity costs are generally costs that tend to vary with the amount of water produced. Variable commodity costs include costs of chemicals, most power costs, and other cost components that increase or decrease in relation to the volume of water supplied. Fixed commodity costs include fixed operations and maintenance and capital financing costs that are not related to accommodating peak demands or standby service.

Standby service costs relate to Metropolitan's role in ensuring system reliability during emergencies such as an earthquake or an outage of a major facility like the Colorado River Aqueduct. The standby costs identified include the emergency storage capacity within the system, and the standby capacity within the conveyance and distribution systems.

An additional component used in Metropolitan's cost classification process is the hydroelectric component. While not a part of most water utilities' cost classification procedures, the hydroelectric classification component is necessary to segregate revenue requirements carried from the hydroelectric function established in the functional allocation process. Hydroelectric revenue requirements are later embedded in the distribution function. Any net revenues generated by the hydroelectric operations offset the distribution costs and reduce the System Access Rate. All users of the distribution system benefit proportionately from the revenue offset provided by the sale of hydroelectric energy.

Schedule 6 provides the classification percentages used to distribute the service function costs into demand, commodity and standby service classification categories. All of the supply costs are classified as fixed commodity costs. Because these particular supply costs have been incurred to provide an amount of annual reliable system yield and not to provide peak demand delivery capability or standby service, they are reasonably treated as fixed commodity costs.

Costs for the Conveyance and Aqueduct (C&A) service function are classified into demand, commodity, and standby categories. Because the capital costs for C&A were incurred to meet all three classification categories, an analysis of C&A capacity usage for the test year was used to determine that 54 percent of the available conveyance capacity varies with the quantity of water produced. A system peak factor[1] of 1.4 was applied to the annual usage to determine that 24 percent of available capacity is used to meet peak monthly deliveries to the member agencies. The remaining portion of C&A, around 22 percent, is used for standby. The same classification percentages are applied to the CRA, SWP, and Other (Inland Feeder) Conveyance and Aqueduct sub-functions. The classification shares reflect the system average use of conveyance capacity and not the usage of individual facilities. All of the Conveyance and Aqueduct energy costs for pumping water to Southern California are classified as variable commodity costs and, therefore, are not shown in Schedule 6 because they carry through the classification step.

Storage service function costs for emergency, drought and regulatory storage are also distributed to the classification categories based on the type of service provided. Emergency storage costs are classified as 100 percent standby related. Emergency storage is a prime example of a cost Metropolitan incurs to ensure the reliability of deliveries to the member agencies. In effect, through the emergency storage capacity in the system, Metropolitan is "standing by" to provide service in the event of a catastrophe such as a major earthquake that disrupts regional conveyance capacity for an extended period of time. Drought carryover storage serves to provide reliable supplies by carrying over surplus supplies from periods of above normal precipitation and snow pack to drought periods when supplies decrease. Drought storage creates supply and is one component of the portfolio of resources that result in a reliable amount of annual system supplies. As a result, drought storage is classified as a fixed commodity cost, in the same manner as Metropolitan's supply costs. Regulatory storage within the Metropolitan system provides operational flexibility in meeting peak demands and flow requirements, essentially increasing the physical distribution capacity. Therefore, regulatory storage is classified in the same manner as distribution costs.

[1] Peak monthly deliveries to the member agencies average about 44 percent more than the average monthly deliveries.

Distribution service function costs were classified as fixed commodity by using projected sales data for the test year. During this period, 44 percent of the system distribution capacity varies with the quantity of water produced. Distribution service function costs were classified as fixed demand by using three years of recorded non-coincident peaks. The difference between the three-year average non-coincident peak and the fixed commodity flows divided by the system capacity, or 39 percent of the distribution capacity, was used to meet peak day demands. Although the Metropolitan distribution system has a great deal of operational flexibility, the total amount of distribution capacity was limited to the historicalpeak non-coincident[2] 24-hour daily flow of all the member agencies. The remaining17 percent of distribution capacity is associated with standby service.

Treatment service function costs were also classified as fixed commodity by using projected treated deliveries to the member agencies for the test year. Treatment fixed demand percentage calculation uses system non-coincident peak factor applied to the test year usage; the remaining capacity is associated with standby service. Total treated water capacity of 4,204 cfs, the total design capacity of all the treatment plants, was used in the calculation. Administrative and general costs have been allocated to the classification categories by service function based on the ratio of classified non-A&G service function costs to total non-A&G service function costs.

[2] The term "non-coincident" means that the peak day flow for each agency may or may not coincide with the peak day system flow. Both non-coincident and coincident approaches to measuring peak demands are used in rate design approaches. A non-coincident approach is used in the rate design to capture the different operating characteristics of the member agencies (e.g., the distribution system is designed to meet peak demands in different load areas within the System that have non-coincident demands due to each member agencies unique operating characteristics).

Schedule 6. Classification Percentages

Function	Classification Percentages: Fixed Commodity	Fixed Demand	Fixed Standby	Total % Classified	Comments
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs classified as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs classified as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	54%	24%	22%	100%	Demand percentage represents amount of system conveyance capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remainding conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	54%	24%	22%	100%	
Other	54%	24%	22%	100%	
Storage					
Emergency	0%	0%	100%	100%	Classifies as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Classified as fixed commodity (recovered by Supply Rates)
Regulatory	44%	39%	17%	100%	Classified the same way as distribution.
Treatment	30%	30%	40%	100%	Demand percentage represents amount of system treatment capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same classification is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution	44%	39%	17%	100%	Demand percentage represents amount of system distribution capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same classification is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.

Totals may not foot due to rounding

A summary of cost classification results is shown in Schedule 7. Theclassification of the service function costs results in about 9 percent, or $133 million of the total revenue requirements, being allocated to the demand classification category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to C&A fixed demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

Schedule 7. Service Function Revenue Requirements (by classification category)

Fiscal year ending 2015 Functional categories (by sub-Fuction)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total Classified
Source of Supply						
CRA	$ -	$ 52,741,102	$ -	$ -	$ -	$ 52,741,102
SWP	-	113,032,908	-	-	-	113,032,908
Other Supply	-	13,149,438	-	-	-	13,149,438
Subtotal: Source of Supply	-	178,923,447	-	-	-	**178,923,447**
Conveyance & Aqueduct						
CRA						
CRA Power	-	15,677,878	-	29,718,233	-	45,396,111
CRA All Other	3,755,098	51,557,144	3,527,190	-	-	58,839,432
SWP						
SWP Power	-	-	-	190,576,058	-	190,576,058
SWP All Other	10,617,196	174,460,076	9,972,807	-	-	195,050,079
Other Conveyance & Aqueduct	21,722,867	63,399,948	21,352,077	-	-	106,474,891
Subtotal: Conveyance & Aqueduct	36,095,161	305,095,045	34,852,074	220,294,291	-	**596,336,571**
Storage						
Storage Costs Other Than Power						
Emergency	-	9,890,309	68,847,461	-	-	78,737,770
Drought	-	70,423,909	-	-	-	70,423,909
Regulatory	6,833,665	10,437,148	2,957,425	-	-	20,228,238
Storage Power	-	-	-	(1,473,247)	-	(1,473,247)
Subtotal: Storage	6,833,665	90,751,367	71,804,886	(1,473,247)	-	**167,916,671**
Water Quality						
CRA	-	-	-	-	-	-
SWP	-	-	-	-	-	-
Other	-	-	-	-	-	-
Subtotal: Water Quality	-	-	-	-	-	**-**
Treatment	53,774,185	160,272,997	65,975,221	30,061,780	-	**310,084,182**
Distribution	37,191,750	124,404,549	16,095,582	-	-	**177,691,882**
Demand Management	-	81,216,825	-	-	-	**81,216,825**
Hydroelectric	-	-	-	-	(518,683)	**(518,683)**
Total Costs Classified	**$ 133,894,761**	**$ 940,664,230**	**$ 188,727,763**	**$ 248,882,824**	**$ (518,683)**	**$ 1,511,650,894**

Totals may not foot due to rounding

About 62 percent of the revenue requirement ($941 million) is classified as fixed commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs classified to the Standby category total about $189 million and account for about 12 percent of the revenue requirements. Standby service costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby service. The variable commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are classified as variable commodity costs, total about $249 million, and account for about 16 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

2 Rates and Charges

Schedule 8 provides a cross-reference between the classified service function costs and their allocation to the rate design elements. The specifics of each rate design element are discussed in detail in the following section. Schedule 9 summarizes the rates and charges that would be effective on January 1, 2015 using the assumptions and methodology of this report. Average costs by member agency will vary depending upon an agency's RTS allocation, capacity charge and relative proportions of treated and untreated Tier 1 and Tier 2 purchases.

Schedule 8. Classified Service Function Revenue Requirements (by rate design element)

Fiscal year ending 2015	Rate Design Elements							
Service Function by Classification Category	Supply Rates	System Access Rate	Water Stewardship Rate	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	Total Costs Allocated
Supply								
Fixed Demand	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fixed Commodity	178,923,447	-	-	-	-	-	-	178,923,447
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	178,923,447	-	-	-	-	-	-	178,923,447
Conveyance and Aqueduct								
Fixed Demand	-	-	-	-	-	36,095,161	-	36,095,161
Fixed Commodity	-	305,095,045	-	-	-	-	-	305,095,045
Fixed Standby	-	-	-	-	-	34,852,074	-	34,852,074
Variable Commodity	-	-	-	220,294,291	-	-	-	220,294,291
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Conveyance and Aqueduct	-	305,095,045	-	220,294,291	-	70,947,234	-	596,336,571
Storage								
Fixed Demand	-	-	-	-	6,833,665	-	-	6,833,665
Fixed Commodity	70,423,909	20,327,457	-	-	-	-	-	90,751,367
Fixed Standby	-	-	-	-	-	71,804,886	-	71,804,886
Variable Commodity	(1,473,247)	-	-	-	-	-	-	(1,473,247)
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Storage	68,950,663	20,327,457	-	-	6,833,665	71,804,886	-	167,916,671
Treatment								
Fixed Demand	-	-	-	-	-	-	53,774,185	53,774,185
Fixed Commodity	-	-	-	-	-	-	160,272,997	160,272,997
Fixed Standby	-	-	-	-	-	-	65,975,221	65,975,221
Variable Commodity	-	-	-	-	-	-	30,061,780	30,061,780
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Treatment	-	-	-	-	-	-	310,084,182	310,084,182
Distribution								
Fixed Demand	-	-	-	-	37,191,750	-	-	37,191,750
Fixed Commodity	-	124,404,549	-	-	-	-	-	124,404,549
Fixed Standby	-	-	-	-	-	16,095,582	-	16,095,582
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	(518,683)	-	-	-	-	-	(518,683)
Subtotal: Distribution	-	123,885,866	-	-	37,191,750	16,095,582	-	177,173,199
Demand Management								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	81,216,825	-	-	-	-	81,216,825
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	81,216,825	-	-	-	-	81,216,825
Total								
Fixed Demand	-	-	-	-	44,025,415	36,095,161	53,774,185	133,894,761
Fixed Commodity	249,347,357	449,827,052	81,216,825	-	-	-	160,272,997	940,664,230
Fixed Standby	-	-	-	-	-	122,752,542	65,975,221	188,727,763
Variable Commodity	(1,473,247)	-	-	220,294,291	-	-	30,061,780	248,882,824
Hydroelectric	-	(518,683)	-	-	-	-	-	(518,683)
Total	**$ 247,874,110**	**$ 449,308,368**	**$ 81,216,825**	**$ 220,294,291**	**$ 44,025,415**	**$ 158,847,703**	**$ 310,084,182**	**$ 1,511,650,894**

Totals may not foot due to rounding

Schedule 9. Rates and Charges Summary

Effective January 1st	2014	2015	2016
Tier 1 Supply Rate ($/AF)	$148	$158	$156
Tier 2 Supply Rate ($/AF)	$290	$290	$290
System Access Rate ($/AF)	$243	$257	$259
Water Stewardship Rate ($/AF)	$41	$41	$41
System Power Rate ($/AF)	$161	$126	$138
Full Service Untreated Volumetric Cost ($/AF)			
Tier 1	$593	$582	$594
Tier 2	$735	$714	$728
Full Service Exchange Cost ($/AF)	$445	$424	$438
Treatment Surcharge ($/AF)	$297	$341	$348
Full Service Treated Volumetric Cost ($/AF)			
Tier 1	$890	$923	$942
Tier 2	$1,032	$1,055	$1,076
Readiness-to-Serve Charge ($M)	$166	$158	$153
Capacity Charge ($/cfs)	$8,600	$11,100	$10,900

2.1 System Access Rate (SAR)

The SAR is a volumetric[3] system-wide rate levied on each acre-foot of water that moves through the MWD system. The MWD system includes MWD's right to use SWP facilities for transportation of SWP and non-SWP water. All system users (member agency or third party) pay the SAR to use Metropolitan's conveyance and distribution system. To meet the board stated objective to collect all costs in 2014/15, the SAR would increase to $257 per acre-foot. The SAR recovers the cost of providing conveyance and distribution capacity to meet average annual demands. Current estimates indicate that the SAR revenue requirement will be about $449 million in FY 2014/15, or 30 percent of the total revenue requirement.

2.2 Water Stewardship Rate (WSR)

The WSR would remain unchanged at $41 per acre-foot. The WSR recovers the costs of providing financial incentives for existing and future investments in local resources including conservation and recycled water. These investments or incentive payments are identified as the "demand management" service function in the cost of service process. Demand management costs are classified as 100 percent fixed commodity costs and are estimated to be about $81 million in FY 2014/15, about 5 percent of the revenue requirement. The WSR is a volumetric rate paid by each acre-foot of water that moves through the Metropolitan system. All system users (member agency or third parties) will pay the same proportional costs for existing and future conservation and recycling investments.

Investments in conservation, recycling, and groundwater recovery decrease the region's overall dependence on imported water supplies from environmentally sensitive areas like the Bay-Delta; increase the overall level of water supply reliability in Southern California; reduce and defer system capacity expansion costs; and create available space to be used to complete water transfers. Because conservation measures and local resource investments reduce the overall level of dependence on the imported water system, more capacity is available in existing facilities for a longer period of time. The space in the system made available by conservation and recycling is open to all system users. Similar to the public benefit charges implemented in the electric and natural gas industries in California after "open access" (customer choice of supplier) was implemented, the regional and statewide benefits of demand management are assessed to all users of the Metropolitan system, regardless of the source of the imported water supply.

The benefits of demand management programs are recognized by section 130.5 of the MWD Act, enacted by S.B. 60 (Stats. 1999, ch. 414), which requires the Metropolitan to "place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." Because Metropolitan is mandated under S.B. 60 to fund water supply programs like conservation and recycling, it is appropriate to recover the costs of supporting these programs on all water moved through the system.

2.3 System Power Rate (SPR)

SPR would decrease to $126 per acre-foot in 2015. The SPR is a volumetric rate that recovers the costs of pumping water to Southern California. The SPR recovers the cost of power for both the SWP and CRA. In FY 2014/15 the revenue requirement for the SPR is estimated to be about $220 million, about 15 percent of the total revenue requirement.

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[3] A volumetric rate is a charge applied to the actual amount of water delivered.

2.4 Treatment Surcharge

The treatment surcharge would increase to $341 per acre-foot to collect all treatment costs in 2014/15. The treatment surcharge is a system-wide volumetric rate set to recover the cost of providing treated water service. The treatment surcharge revenue requirement is expected to be about $310 million in FY 2014/15, almost 21 percent of the total revenue requirement. The treatment surcharge recovers all costs associated with providing treated water service, including commodity, demand and standby related costs. Significant capital improvements at Metropolitan's five treatment plants, such as the Ozone Retrofit Program at Weymouth, as well as refurbishments and improvement programs at all five treatment plants result in additional capital financing costs being allocated to the treatment surcharge.

2.5 Capacity Charge

The Capacity Charge would increase to $11,100 per cubic-foot-second of capacity during calendar year 2015. The increase is due to the increase in pay-as-you-go funding of the CIP, and the increase in the fixed demand classification factor. The capacity charge is levied on the maximum summer day demand placed on the distribution system between May 1 and September 30 for a three-calendar year period. The three-year period ending December 31, 2013 is used to levy the capacity charge effective January 1, 2015 through December 31, 2015. Demands measured for the purposes of billing the capacity charge include all firm demand including wheeling service and exchanges.

The capacity charge is intended to pay for the cost of peaking capacity on Metropolitan's distribution system, while providing an incentive for local agencies to decrease their use of the Metropolitan system to meet peak day demands and to shift demands into lower use time periods particularly October through April. Over time, a member agency will benefit from local supply investments and operational strategies that reduce its peak day demand on the system in the form of a lower total capacity charge. The estimated capacity charge to be paid by each member agency in calendar year 2015is included in Schedule 10.

Schedule 10. Capacity Charge (by member agency)

	Peak Day Demand (cfs) (May 1 through September 30) Calendar Year				Rate ($/cfs): $11,100
AGENCY	2011	2012	2013	3-Year Peak	Calendar Year 2015 Capacity Charge
Anaheim	39.3	38.3	31.3	39.3	$436,230
Beverly Hills	31.5	32.7	30.8	32.7	$362,970
Burbank	21.4	20.9	19.7	21.4	$237,540
Calleguas	210.1	224.0	228.7	228.7	$2,538,570
Central Basin	79.2	74.5	73.6	79.2	$879,120
Compton	2.4	2.3	2.9	2.9	$32,190
Eastern	190.9	237.2	267.4	267.4	$2,968,140
Foothill	19.0	17.6	18.9	19.0	$210,900
Fullerton	27.4	24.4	20.0	27.4	$304,140
Glendale	49.0	41.5	44.9	49.0	$543,900
Inland Empire	138.0	126.7	153.9	153.9	$1,708,290
Las Virgenes	43.4	41.9	43.2	43.4	$481,740
Long Beach	59.9	60.4	66.9	66.9	$742,590
Los Angeles	329.0	512.9	767.1	767.1	$8,514,810
MWDOC	390.1	401.1	381.9	401.1	$4,452,210
Pasadena	50.6	52.1	52.5	52.5	$582,750
San Diego CWA	760.7	961.5	967.4	967.4	$10,738,140
San Fernando	1.6	2.8	4.9	4.9	$54,390
San Marino	1.3	5.3	6.1	6.1	$67,710
Santa Ana	20.0	19.2	19.6	20.0	$222,000
Santa Monica	21.1	19.7	22.7	22.7	$251,970
Three Valleys	122.7	133.0	178.6	178.6	$1,982,460
Torrance	35.5	36.2	34.1	36.2	$401,820
Upper San Gabriel	20.4	15.2	16.1	20.4	$226,440
West Basin	214.6	222.6	230.2	230.2	$2,555,220
Western MWD	179.3	193.7	198.6	198.6	$2,204,460
Total	**3,058.4**	**3,517.8**	**3,882.0**	**3,937.0**	**$43,700,700**

Totals may not foot due to rounding

2.6 Readiness-to-Serve Charge

The costs of providing standby service, such as emergency storage, are recovered by the RTS. Metropolitan's costs for providing emergency storage capacity within the system are estimated to be about $72 million in FY 2014/15. In addition, to simplify the rate design by reducing the number of separate charges, the demand and standby related costs identified for the conveyance and aqueduct service function, and standby costs for the distribution function, are also allocated to the RTS. These costs are estimated to be about $87million in FY 2014/15. The RTS would decrease to $158million in calendar year 2015. The decrease is due to the decrease in the standby classification factor which outweighs the increase in pay-as-you go funding of the CIP.

The RTS is allocated to the member agencies based on each agency's proportional share of a ten-year rolling average of all firm deliveries (including water transfers and exchanges that use Metropolitan system capacity). A ten-year rolling average leads to a relatively stable RTS allocation that reasonably represents an agency's potential long-term need for standby service under different demand conditions. Member agencies that so choose may have a portion of their total RTS

obligation offset by standby charge collections levied by Metropolitan on behalf of the member agency. The estimatedRTS for each member agency for calendar year 2015is shown in Schedule 11.

Schedule 11. Readiness-to-Serve Charge (by member agency)

			Water rate $91.14/acre-foot
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2003/04 - FY2012/13	RTS Share	12 months @ $158 million per year (1/15-12/15)
Anaheim	22,572	1.30%	$ 2,057,081
Beverly Hills	11,524	0.66%	1,050,245
Burbank	12,642	0.73%	1,152,126
Calleguas MWD	109,981	6.34%	10,023,254
Central Basin MWD	56,302	3.25%	5,131,143
Compton	2,538	0.15%	231,331
Eastern MWD	97,935	5.65%	8,925,454
Foothill MWD	10,373	0.60%	945,347
Fullerton	10,147	0.59%	924,732
Glendale	20,503	1.18%	1,868,566
Inland Empire Utilities Agency	60,010	3.46%	5,469,040
Las Virgenes MWD	22,797	1.31%	2,077,605
Long Beach	34,315	1.98%	3,127,321
Los Angeles	289,350	16.69%	26,370,304
Municipal Water District of Orange County	222,281	12.82%	20,257,825
Pasadena	21,669	1.25%	1,974,794
San Diego County Water Authority	393,731	22.71%	35,883,186
San Fernando	138	0.01%	12,559
San Marino	1,002	0.06%	91,300
Santa Ana	13,509	0.78%	1,231,150
Santa Monica	11,001	0.63%	1,002,553
Three Valleys MWD	68,167	3.93%	6,212,474
Torrance	18,845	1.09%	1,717,453
Upper San Gabriel Valley MWD	17,081	0.99%	1,556,716
West Basin MWD	131,114	7.56%	11,949,272
Western MWD	74,144	4.28%	6,757,168
MWD Total	1,733,668	100.00%	$ 158,000,000

Totals may not foot due to rounding

2.7 Purchase Order

The Purchase Order determines the amount of water that can be purchased at the Tier 1rate. The existing Amended and Restated Purchase Order agreements presently in effect expire December 31, 2014. The Purchase Order will be addressed in the second half of 2014.

2.8 Tier 2 supply rate

The Tier 2 Supply Rate reflects Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and conservation. The Tier 2 Supply Rate would remain at its current level of $290 per acre-foot. At an expected average sales level of 1.75 million acre-feet, it is estimated that no acre-feet will be sold at the Tier 2 Supply Rate.

2.9 Tier 1 supply rate

The total revenue requirement for the supply service function is about $248 million in FY 2014/15. The Tier 1 Supply Rate would be increased to $158 per acre-foot in 2015. The Tier 1 Supply Rate is simply calculated as the amount of the total supply revenue requirement that is not recovered by the Tier 2 Supply Rate divided by the estimated amount of Tier 1 water sales. At an expected demand level of about 1.75 MAF, it is estimated that Metropolitan will sell 1.57MAF at the Tier 1 Supply Rate in 2014/15.
The two-tier pricing approach is closely linked to the Purchase Order and a base level of demand. The 2015 Tier 1 Annual Limit for all member agencies will be provided to the Board later in 2014.

3 Sales

Staff estimates of water sales used for developing the rate recommendation were based on current member agency demands and information and an expectation that demands will trend to levels expected under normal weather conditions. Since 1989/90, total sales have averaged about 2.00 MAF per year, ranging from a high of around 2.5 MAF in 1989/90 to a low of about 1.5 MAF in 1997/98. In 2014/15, water sales are projected to be 1.75 MAF. Treated water sales are projected to be 910TAF in 2014/15 and Exchanges 181 TAF.

4 Proof of Revenue

Based on expected sales of 1.75 MAF the expected revenues would be about $9.7 million lower than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost-of-service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements, but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2015, the expected revenues for 2014/15 will be about $22.2million lower than the total revenue requirement in 2014/15. The total revenue requirement includes a $2.8 million increase in the required reserves for the Revenue Remainder Fund. Draws from the Water Stewardship Fund and Treatment Surcharge Stabilization Fund are $9.5 million and $4.4 million respectively in 2014/15. Accounting for these adjustments, the required draw from reserves is almost $5.6 million in 2014/15.

Schedule 12. FY 2014/15 Proof of Revenue if Rates Effective for Full Test Year ($ millions)

	Revenues if Rates Effective July 1st	Revenue Requirements	Difference	% Over (Under) Collected
Supply	247.9	247.9	0.0	0%
System Access Rate	449.8	449.3	0.4	0%
Water Stewardship Rate	71.8	81.2	(9.5)	-12%
System Power Rate	220.5	220.3	0.2	0%
Treatment Surcharge	310.4	310.1	0.3	0%
Readiness-to-serve Charge	158.0	158.8	(0.8)	-1%
Capacity Charge	43.7	44.0	(0.3)	-1%
Total	**1,501.9**	**1,511.7**	**(9.7)**	**-1%**

Totals may not foot due to rounding

Schedule 13. FY 2014/15 Proof of Revenue if Rates Effective January 1 ($ millions)

	Revenues if Rates Effective Jan 1	Revenue Requirements	Difference	% Over (Under) Collected
Supply	239.1	247.9	(8.7)	-4%
System Access Rate	436.1	449.3	(13.2)	-3%
Water Stewardship Rate	71.8	81.2	(9.5)	-12%
System Power Rate	254.5	220.3	34.2	16%
Treatment Surcharge	288.4	310.1	(21.7)	-7%
Readiness-to-serve Charge	162.0	158.8	3.2	2%
Capacity Charge	37.5	44.0	(6.5)	-15%
Total	**1,489.5**	**1,511.7**	**(22.2)**	**-1%**

Totals may not foot due to rounding

Metropolitan Water District of Southern California

Fiscal Year 2015/16Cost of Service Option 1

April2014

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1 Cost of Service

Prior to discussing the specific rates and charges that make up the rate structure, it is important to understand the cost of service process that supports the rates and charges. The purpose of the cost of service process is to: (1) identify which costs should be recovered through rates and charges; (2) organize Metropolitan's costs into service functions; (3) classify service function costs on the basis for which the cost was incurred; and (4) allocate costs to rate elements. The purpose of sorting Metropolitan's costs in a manner that reflects the type of service provided (e.g., supply vs. conveyance), the characteristics of the cost (e.g., fixed or variable) and the reason why the cost was incurred (e.g., to meet peak or average demand) is to create logical cost of service "building blocks". The building blocks can then be arranged to design rates and charges with a reasonable nexus between costs and benefits.

1.1 Cost of Service Process

The general cost of service process involves the four basic steps outlined below.

Step 1 - Development Of Revenue Requirements

In the revenue requirement step, the costs that Metropolitan must recover through rates and charges, after consideration of revenue offsets, are identified. The cash needs approach, an accepted industry practice for government-owned utilities, has historically been used in identifying Metropolitan's revenue requirements and was applied for the purposes of this study. Under the cash needs approach, revenue requirements include operating costs and annual requirements for meeting financed capital items (debt service, funding of replacement and refurbishment from operating revenues, etc.).

Step 2 – Identification Of Service Function Costs

In the functional allocation step, revenue requirements are allocated to different categories based on the operational functions served by each cost. The functional categories are identified in such a way as to allow the development of logical allocation bases. The functional categories used in the cost of service process include:

- Supply
- Conveyance and Aqueduct
- Storage
- Treatment
- Distribution
- Demand Management
- Administrative and General
- Hydroelectric

In order to provide more finite functional allocation, many of these functional categories are subdivided into more detailed sub-functions in the cost of service process. For example, costs for the Supply and Conveyance and Aqueduct functions are further subdivided into the sub-functions State Water Project (SWP), Colorado River Aqueduct (CRA), and Other. Similarly, costs in the Storage function are broken down into the sub-functions Emergency Storage, Drought Carryover Storage, and Regulatory Storage.

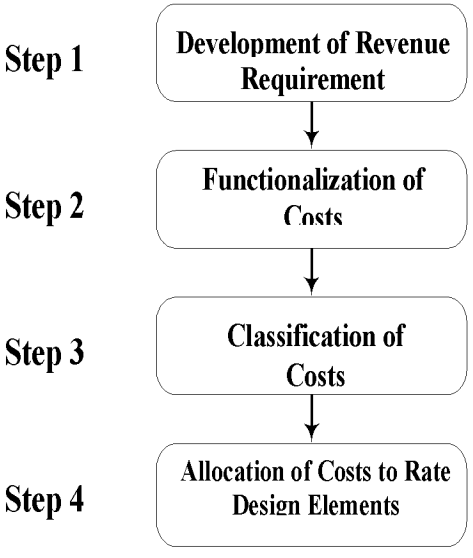
Step 3 - Classification Of Costs

In the cost classification step, functionalized costs are separated into categories according to their causes and behavioral characteristics. Proper cost classification is critical in developing a rate structure that recovers costs in a manner consistent with the causes and behaviors of those costs. Under American Water Works Association (AWWA) guidelines, cost classification may be done using either the Base/Extra-Capacity approach or the Commodity/Demand approach. In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Step 4 - Allocation Of Costs To Rate Design Elements

The allocation of costs to the rate design elements depends on the purpose for which the cost was incurred and the manner in which the member agencies use the Metropolitan system. For example, costs incurred to meet average system demands are typically recovered by dollar per acre-foot rates and are allocated based on the volume of water purchased by each agency. Rates that are levied on the amount or volume of water delivered are commonly referred to as volumetric rates as the customer's costs vary with the volume of water purchased. Costs incurred to meet peak distribution demands (referred to in this report as demand costs) are recovered through a peaking charge (the Capacity Charge) and are allocated to agencies based on their peak summer demand behavior. Costs incurred to provide standby service in the event of an emergency are referred to here as standby costs. Differentiating between costs for average usage and peak usage is just one example of how the cost of service process allows for the design of rates and charges that improves overall customer equity and efficiency. Figure 1 summarizes the cost of service process.

Figure 1. The Cost of Service Process



1.2 Revenue Requirements

The estimated revenue requirements presented in this report are for FY 2015/16. Throughout the report, FY 2015/16 is used as the "test year" to demonstrate the application of the cost of service process. Schedule 1 summarizes the FY 2015/16 revenue requirement by the major budget line items used in Metropolitan's budgeting process. Current estimates indicate Metropolitan's annual expenditures (including capital financing costs, but not construction outlays financed with bond proceeds, if any) will total approximately $1.661 billion in FY 2015/16.

The rates and charges do not have to cover this entire amount. Metropolitan generates a significant amount of revenue from interest income, hydroelectric power sales and miscellaneous income. These internally generated revenues are referred to as revenue offsets and are expected to generate about $58 million in FY 2015/16. It is expected that Metropolitan will also generate about $92 million in ad valorem property tax revenues (assuming that ad valorem tax rates are maintained at 0.0035% of assessed valuation). Property tax revenues are used to pay for a portion of Metropolitan's general obligation bond debt service, a portion of Metropolitan's obligation to pay for debt service on bonds issued to fund the State Water Project (SWP), and other SWP costs. The total revenue offsets for FY 2015/16 are estimated to be around $150 million. Therefore, the revenue required from rates and charges is the difference between the total costs and the revenue offsets, or $1.511 billion. Given an effective date of January 1, 2016, the rates and charges recommended in this report, combined with rates and charges effective through December 31, 2015 will generate a total of $1.507 billion in 2015/16.

All of Metropolitan's costs fall under the broad categories of Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific organizational groups. General District Requirements consist of requirements associated with the Colorado River

Aqueduct (CRA), SWP, the capital financing costs associated with the Capital Investment Plan (CIP), and Water Management Programs. General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code.

When considered in total, General District Requirements make up approximately 70 percent of the absolute value of the allocated costs. The largest component of the revenue requirement relates tothe capital financing program at $546 million, which makes up approximately 30 percent of Metropolitan's FY 2015/16 revenue requirements. Capital financing costs include pay-as-you-go funding of the CIP at $221 million. Metropolitan's SWP costsis the second largest component of the revenue requirement at $515 million, constituting approximately 28 percent of the revenue requirement. Metropolitan's SWP contract requires Metropolitan to pay its allocated share of the capital, minimum operations, maintenance, power and replacement costs incurred to develop and convey its water supply entitlement, irrespective of the quantity of water Metropolitan takes delivery of in any given year. Departmental O&M costs at $391 million make up 22 percent of the total revenue requirement in FY 2015/16. Water System Operations is the largest single component of the Departmental Costs and accounts for 12 percent of the revenue requirements. Water System Operations responsibilities include operating and maintaining Metropolitan's pumping, storage, treatment, and hydroelectric facilities, as well as the CRA and other conveyance and supply facilities.

Schedule 1. Revenue Requirements (by budget line item)

	Fiscal Year Ending 2016	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of the General Manager & Human Resources	$ 25,768,716	1.4%
External Affairs	17,188,606	0.9%
Water System Operations	215,676,523	11.9%
Chief Financial Officer	9,187,432	0.5%
Business Technology & Engineering Services	84,984,360	4.7%
Real Property Development & Mgmt	5,289,803	0.3%
Water Resource Management	16,340,755	0.9%
Ethics Department	990,943	0.1%
General Counsel	12,598,621	0.7%
Audit Department	2,925,708	0.2%
Total	**390,951,466**	**21.6%**
General District Requirements		
State Water Project	515,004,362	28.4%
Colorado River Aqueduct Power	36,503,152	2.0%
Supply Programs	66,451,886	3.7%
Demand Management	61,654,768	3.4%
Capital Financing Program	545,707,370	30.1%
Operating Equipment and Leases	26,634,780	1.5%
Increase (Decrease) in Required Reserves	18,200,000	1.0%
Total	**1,270,156,317**	**70.1%**
Revenue Offsets	**(149,902,442)**	**8.3%**
Net Revenue Requirements	**$ 1,511,205,342**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
Totals may not foot due to rounding

1.3 Service Function Costs

Several major service functions result in the delivery of water to Metropolitan's member agencies. These include the supply itself, the conveyance capacity and energy used to move the supply, storage of water, distribution of supplies within Metropolitan's system, and treatment of these supplies. Metropolitan's rate structure recovers the majority of the cost of providing these functions through rates and charges.

The functional categories developed for Metropolitan's cost of service process are consistent with the AWWA rate setting guidelines, a standard chart of accounts for utilities developed by the National Association of Regulatory Utility Commissioners (NARUC), and the National Council of Governmental Accounting. Because all water utilities are not identical, the rate structure reflects Metropolitan's unique physical, financial, and institutional characteristics, as permitted under the AWWA guidelines.

A key goal of functional allocation is to maximize the degree to which rates and charges reflect the costs of providing different types of service. For functional allocation to be of maximum benefit, two criteria must be kept in mind when establishing functional categories.

- The categories should correlate charges for different types of service with the costs of providing those different types of service; and
- Each function should include reasonable allocation bases by which costs may be allocated.

Each of the functions developed for the cost of service process is described below.

- *Supply.* This function includes costs for those SWP and CRA facilities and programs that relate to maintaining and developing supplies to meet the member agencies' demands. For example, Metropolitan's supply related costs include investments in the Conservation Agreement with the Imperial Irrigation District and the Palo Verde Irrigation District (PVID) Program from the Colorado River supply programs. The SWP programs include transfer programs such as Kern Delta Program, Semitropic Water Storage Program, Yuba Accord Program, and the Arvin-Edison Water Storage Program. Costs for in-basin programs within Metropolitan's service area, such as Conjunctive Use Programsare also included.
- *Conveyance and Aqueduct.* This function includes the capital, operations, maintenance, and overhead costs for SWP and CRA facilities that convey water through Metropolitan's internal distribution system. Variable power costs for the SWP and CRA are also considered to be Conveyance and Aqueduct costs but are separately reported under a "power" sub-function. Conveyance and Aqueduct facilities can be distinguished from Metropolitan's other facilities primarily by the fact that they do not typically include direct connections to the member agencies. For purposes of this study, the Inland Feeder Project functions as an extension of the SWP East Branch and is therefore considered a Conveyance and Aqueduct facility as well.
- *Storage.* Storage costs include the capital financing, operating, maintenance, and overhead costs for Diamond Valley Lake, Lake Mathews, Lake Skinner, and five smaller regulatory reservoirs within the distribution system. Metropolitan's larger storage facilities are operated to provide: (1) emergency storage in the event of an earthquake or similar system outage; (2) drought storage that produces additional supplies during times of shortage; and (3) regulatory storage to balance system demands and supplies and provide for operating

flexibility. To reasonably allocate the costs of storage capacity among member agencies, the storage service function is categorized into sub-functions of emergency, drought, and regulatory storage.

- *Treatment.* This function includes capital financing, operating, maintenance, and overhead costs for Metropolitan's five treatment plants and is considered separately from other costs so that treated water service may be priced separately.
- *Distribution.* This function includes capital financing, operating, maintenance, and overhead costs for the "in-basin" feeders, canals, pipelines, laterals, and other appurtenant works. The "in-basin" facilities are distinguished from Conveyance and Aqueduct facilities at the point of connection to the SWP, Lake Mathews, and other major turnouts along the CRA facilities.
- *Demand Management.* A separate demand management service function has been usedto clearly identify the cost of Metropolitan's investments in local resources like conservation, recycling, and desalination.
- *Administrative and General (A&G).* These costs occur in each of the Groups' departmental budgets and reflect overhead costs that cannot be directly functionalized. The cost-of-service process allocates A&G costs to the service functions based on the labor costs of non-A&G dollars allocated to each function.
- *Hydroelectric.* Hydroelectric costs include the capital financing, operating, maintenance, and overhead costs incurred to operate the 16 small hydroelectric plants located throughout the water distribution system.

1.3.1 Functional Allocation Bases

The functional allocation bases are used to allocate costs to the various service functions. The primary functional allocation bases used in the cost-of-service process are listed below.

- Direct assignment
- Net Book Value plus Work-In-Progress
- Prorating in proportion to other allocations
- Manager analysis
- Prior year results

Schedule 2 summarizes the amounts of total cost allocated using each of the above types of allocation bases.

Schedule 2. Summary of Functional Allocations by Type of Allocation Basis

Primary Functional Allocation Bases	Estimated for FY 2016	% of Allocated Dollars
Direct Assignment	$ 953,742,911	52.7%
Net Book Value/Work in Progress	591,851,933	32.7%
Prorating	87,925,396	4.9%
Manager Analysis	35,315,288	2.0%
Prior-Year Results	75,722,811	4.2%
Other	$ 66,451,886	3.7%
Total Dollars Allocated	**$ 1,811,010,225**	**100.0%**
Portion of Above Allocations Relating to:		
Revenue Requirements before Offsets	1,661,107,784	
Revenue Offsets	149,902,442	
Total Dollars Allocated	**$ 1,811,010,225**	

Totals may not foot due to rounding

Each of the primary allocation bases is discussed in detail in the remainder of this section. Discussion of each allocation basis includes examples of costs allocated using that particular basis.

(a) Direct assignment

Direct assignment makes use of a clear and direct connection between a revenue requirement and the function being served by that revenue requirement. Directly assigned costs typically include: Costs associated with specific treatment plants, purely administrative costs, and certain distribution and conveyance departmental costs. Examples of costs that are directly assigned to specific functional categories are given below.

* Water System Operations Group departmental costs for treatment plants are directly assigned to treatment.
* Transmission charges for SWP are directly assigned to conveyance.

(b) Net Book ValuePlus Work-In-Progress

Capital financing costs, including debt service and funding replacements and refurbishments from operating revenues, comprise about 30percent of Metropolitan's annual revenue requirements. One approach would be to allocate payments on each debt issue in direct proportion to specific project expenditures made using bond proceeds. But, this approach would result in a high degree of volatility in relative capital cost allocations from year to year.
The approach used in this analysis is one widely used in water industry cost of service studies. Capital and debt-related costs (including repair and replacement costs paid from current revenues) are allocated on the basis of the relative net book values of fixed assets plus work in progress for assets under construction within each functional category. This approach produces capital cost allocations that are consistent with the functional distribution of assets. Also, since the allocation basis is tied to fixed asset records rather than debt payment records, the resulting allocations are more reflective of the true useful lives of assets. Use of net book values as an allocation basis provides an improved matching of functional costs with asset lives. A listing of fixed asset net book values summarized by asset function is shown in Schedule 3.

Schedule 3. Net Book Value and Work in Progress Allocation Base

Functional Categories	NBV for FY 2016	% of Total NBV
Source of Supply	$ 30,274,044	0.4%
Conveyance & Aqueduct	1,809,704,101	20.9%
Storage	2,140,326,295	24.7%
Treatment	2,752,343,054	31.8%
Distribution	1,455,183,855	16.8%
Administrative & General	332,149,508	3.8%
Hydroelectric	129,745,901	1.5%
Total Fixed Assets Net Book Value	**$ 8,649,726,758**	**100.0%**

Totals may not foot due to rounding

In most instances, the cost-of-service process uses net book value*plus* work-in-progress to develop allocation bases for debt and capital costs.

Examples of revenue requirements allocated using these net book valueand work-in-progress allocations are shown below.

* Revenue Bond Debt Service: *allocated using Net Book Value plus Work In Progress.*
* Annual deposit of operating revenue to replacement and refurbishment fund: *allocated using Net Book Value plus Work In Progress.*

To calculate the relative percentage of fixed assets in each functional category, Metropolitan staff conducted a detailed analysis of historical accounting records and built a database of fixed asset accounts that contains records for all facilities currently in service and under construction. Each facility was sorted into the major service function that best represented the facilities primary purpose and was then further categorized into the appropriate sub-functions described earlier.

(c) Prorating in proportion to other allocations

Utility cost of service studies frequently contain line items for which it would be difficult to identify an allocation basis specific to that line item. In these cases, the most logical allocation basis is often a prorata blend of allocation results calculated for other revenue requirements in the same departmental group, or general category. Reasonable prorata allocations are based on a logical nexus between a cost and the purpose which it serves. For example: Human Resources Section costs are allocated using all labor costs, since Human Resources spends its time and resources attending to the labor force.

(d) Manager analyses

The functional interrelationships of some organizational units are so complex and/or dynamic that reliable allocation bases can only be developed with extensive input from the organization's

managers. In these cases, managers use their firsthand knowledge of the organization's internal operations to generate a functional analysis of departmental costs. For example, Fleet Services Unit costs are allocated to treatment, storage, conveyance and distribution based on vehicle count by location.

(e) Prior year results

If available, accounting data for the prior fiscal year by appropriation are used to functionalize Departmental O&M costs for several units or sections. Many of the appropriations parallel the service functions used in the cost of service. For example, Conveyance and Distribution Section costs are allocated to distribution, hydroelectric, and conveyance functions based on the prior year accounting data by appropriation.

A summary of the functional allocation results is shown in Schedules 4 and 5. Schedule 4 provides a breakdown of the revenue requirement for FY 2015/16 into the major service functions and sub-functions prior to the redistribution of administrative and general costs. Schedule 5 serves as a cross-reference summarizing how the budget line items are distributed among the service functions. The largest functional component of Metropolitan's revenue requirement is the Conveyance and Aqueduct function, which constitutes approximately 37 percent of the allocated revenue requirement.

Schedule 4. Revenue Requirement (by service function)

Functional Categories	Fiscal Year Ending 2016	% of Allocated Dollars (1)
Source of Supply		
CRA	$ 49,573,495	3.3%
SWP	96,951,217	6.4%
Other Supply	11,621,482	0.8%
Total	**158,146,194**	**10.4%**
Conveyance & Aqueduct		
CRA		
CRA Power (net of sales)	49,217,238	3.2%
CRA All Other	52,674,965	3.5%
SWP		
SWP Power	193,111,079	12.7%
SWP All Other	182,208,199	12.0%
Other Conveyance & Aqueduct	90,684,324	6.0%
Total	**567,895,806**	**37.4%**
Storage		
Storage Costs Other Than Power		
Emergency	69,726,786	4.6%
Drought	58,532,605	3.9%
Regulatory	17,553,035	1.2%
Wadsworth plant pumping/generation	(1,520,282)	0.1%
Total	**144,292,144**	**9.7%**
Treatment		
Jensen	61,456,577	4.0%
Weymouth	64,235,692	4.2%
Diemer	60,228,929	4.0%
Mills	31,063,891	2.0%
Skinner	67,258,178	4.4%
Total	**284,243,268**	**18.7%**
Distribution	158,892,682	10.5%
Demand Management	71,684,023	4.7%
Hydroelectric	(2,903,631)	0.2%
Administrative & General	128,954,856	8.5%
Total Functional Allocations:	**$ 1,511,205,342**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
Totals may not foot due to rounding

Schedule 5. Service Function Revenue Requirements (by budget line item)

Fiscal Year Ending 2016	Source of Supply	Conveyance & Aqueduct	Storage	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total $ Allocated
Departmental Operations & Maintenance									
Office of the General Manager & Human Resources	$ 1,203,318	$ 8,964,397	$ 792,987	$ 4,419,717	$ 3,027,311	$ 370,259	$ 293,646	$ 6,697,083	$ 25,768,716
External Affairs	-	-	-	-	-	2,897,383	-	14,291,223	17,188,606
Water System Operations	12,546,789	38,317,628	3,528,311	97,792,705	57,158,424	8,160	5,370,823	953,683	215,676,523
Chief Financial Officer	-	-	-	-	-	-	-	9,187,432	9,187,432
Business Technology & Engineering Services	2,496,064	10,644,224	8,988,988	18,315,713	11,055,946	735,770	1,032,911	31,714,743	84,984,360
Real Property Development & Mgmt	-	-	5,289,803	-	-	-	-	-	5,289,803
Water Resource Management	9,380,797	-	-	128,775	1,152,505	5,485,083	-	193,594	16,340,755
Ethics Department	-	-	-	-	-	-	-	990,943	990,943
General Counsel	-	-	-	-	-	-	-	12,598,621	12,598,621
Audit Department	-	-	-	-	-	-	-	2,925,708	2,925,708
Total Departmental O&M	25,626,969	57,926,248	18,600,089	120,656,910	72,394,186	9,496,655	6,697,379	79,553,028	390,951,466
General District Requirements									
State Water Project	78,539,665	436,464,698	-	-	-	-	-	-	515,004,362
Colorado River Aqueduct Power	-	36,503,152	-	-	-	-	-	-	36,503,152
Supply Programs	66,451,886	-	-	-	-	-	-	-	66,451,886
Demand Management	-	-	-	-	-	61,654,768	-	-	61,654,768
Capital Financing Program	1,828,348	109,293,922	129,261,272	173,644,085	103,784,375	-	7,835,777	20,059,590	545,707,370
Other Operating Costs	620,797	1,264,620	409,105	2,280,150	1,561,802	1,741,018	151,493	18,605,795	26,634,780
Increase (Decrease) in Required Reserves	-	-	-	-	-	-	-	18,200,000	18,200,000
Total General District Requirements	147,440,696	583,526,391	129,670,378	175,924,235	105,346,178	63,395,786	7,987,270	56,865,385	1,270,156,317
Revenue Offsets	(14,921,471)	(73,556,833)	(3,978,323)	(12,337,878)	(18,847,681)	(1,208,418)	(17,588,280)	(7,463,557)	(149,902,442)
Net Revenue Requirements	**$ 158,146,194**	**$ 567,895,806**	**$ 144,292,144**	**$ 284,243,268**	**$ 158,892,682**	**$ 71,684,023**	**$ (2,903,631)**	**$ 128,954,856**	**$ 1,511,205,342**

Totals may not foot due to rounding

1.4 Classified Costs

In the cost classification step, functionalized costs are further categorized based on the causes and behavioral characteristics of these costs. An important part of the classification process is identifying which costs are incurred to meet average demands vs. peak demands and which costs are incurred to provide standby service. As with the functional allocation process, the proposed classification process is consistent with AWWA guidelines, but has been tailored to meet Metropolitan's specific operational structure and service environment.

Two methods are discussed in the AWWA M1 Manual, Principles of Water Rates, Fees and Charges. These two methods are the Commodity/Demand method and the Base/Extra Capacity method.

In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand method allocates costs that vary with the amount of water produced to the commodity category with all other costs associated with water production allocated to the demand category. In the Base/Extra Capacity method, costs related to average demand conditions are allocated to the base category, and capacity costs associated with meeting above average demand conditions are allocated to the extra capacity category.

The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Classification categories used in the analysis include:

- Fixed demand costs
- Fixed commodity costs
- Fixed standby costs
- Variable commodity costs
- Hydroelectric costs

Demand costs are incurred to meet peak demands. Only the direct capital financing costs were included in the demand classification category. A portion of capital financing costs was included in the demand cost category because in order to meet peak demands additional physical capacity is designed into the system and, therefore, additional capital costs are incurred. Commodity costs are generally costs that tend to vary with the amount of water produced. Variable commodity costs include costs of chemicals, most power costs, and other cost components that increase or decrease in relation to the volume of water supplied. Fixed commodity costs include fixed operations and maintenance and capital financing costs that are not related to accommodating peak demands or standby service.

Standby service costs relate to Metropolitan's role in ensuring system reliability during emergencies such as an earthquake or an outage of a major facility like the Colorado River Aqueduct. The standby costs identified include the emergency storage capacity within the system, and the standby capacity within the conveyance and distribution systems.

An additional component used in Metropolitan's cost classification process is the hydroelectric component. While not a part of most water utilities' cost classification procedures, the hydroelectric classification component is necessary to segregate revenue requirements carried from the hydroelectric function established in the functional allocation process. Hydroelectric revenue requirements are later embedded in the distribution function. Any net revenues generated by the hydroelectric operations offset the distribution costs and reduce the System Access Rate. All users of the distribution system benefit proportionately from the revenue offset provided by the sale of hydroelectric energy.

Schedule 6 provides the classification percentages used to distribute the service function costs into demand, commodity and standby service classification categories. All of the supply costs are classified as fixed commodity costs. Because these particular supply costs have been incurred to provide an amount of annual reliable system yield and not to provide peak demand delivery capability or standby service, they are reasonably treated as fixed commodity costs.

Costs for the Conveyance and Aqueduct (C&A) service function are classified into demand, commodity, and standby categories. Because the capital costs for C&A were incurred to meet all three classification categories, an analysis of C&A capacity usage for the test year was used to determine that 54 percent of the available conveyance capacity varies with the quantity of water produced. A system peak factor[1] of 1.4 was applied to the annual usage to determine that 24 percent of available capacity is used to meet peak monthly deliveries to the member agencies. The remaining portion of C&A, around 22 percent, is used for standby. The same classification percentages are applied to the CRA, SWP, and Other (Inland Feeder) Conveyance and Aqueduct sub-functions. The classification shares reflect the system average use of conveyance capacity and not the usage of individual facilities. All of the Conveyance and Aqueduct energy costs for pumping water to Southern California are classified as variable commodity costs and, therefore, are not shown in Schedule 6 because they carry through the classification step.

Storage service function costs for emergency, drought and regulatory storage are also distributed to the classification categories based on the type of service provided. Emergency storage costs are classified as 100 percent standby related. Emergency storage is a prime example of a cost Metropolitan incurs to ensure the reliability of deliveries to the member agencies. In effect, through the emergency storage capacity in the system, Metropolitan is "standing by" to provide service in the event of a catastrophe such as a major earthquake that disrupts regional conveyance capacity for an extended period of time. Drought carryover storage serves to provide reliable supplies by carrying over surplus supplies from periods of above normal precipitation and snow pack to drought periods when supplies decrease. Drought storage creates supply and is one component of the portfolio of resources that result in a reliable amount of annual system supplies. As a result, drought storage is classified as a fixed commodity cost, in the same manner as Metropolitan's supply costs. Regulatory storage within the Metropolitan system provides operational flexibility in meeting peak demands and flow requirements, essentially increasing the physical distribution capacity. Therefore, regulatory storage is classified in the same manner as distribution costs.

[1] Peak monthly deliveries to the member agencies average about 44 percent more than the average monthly deliveries.

Distribution service function costs were classified as fixed commodity by using projected sales data for the test year. During this period, 44 percent of the system distribution capacity varies with the quantity of water produced. Distribution service function costs were classified as fixed demand by using three years of recorded non-coincident peaks. The difference between the three-year average non-coincident peak and the commodity flows divided by the system capacity, or 39 percent of the distribution capacity, was used to meet peak day demands. Although the Metropolitan distribution system has a great deal of operational flexibility, the total amount of distribution capacity was limited to the historical peak non-coincident[2] 24-hour daily flow of all the member agencies. The remaining 17 percent of distribution capacity is associated with standby service.

Treatment service function costs were also classified as fixed commodity by using projected treated deliveries to the member agencies for the test year. Treatment fixed demand percentage calculation uses system non-coincident peak factor applied to the test year usage; the remaining capacity is associated with standby service. Total treated water capacity of 4,204 cfs, the total design capacity of all the treatment plants, was used in the calculation. Administrative and general costs have been allocated to the classification categories by service function based on the ratio of classified non-A&G service function costs to total non-A&G service function costs.

[2] The term "non-coincident" means that the peak day flow for each agency may or may not coincide with the peak day system flow. Both non-coincident and coincident approaches to measuring peak demands are used in rate design approaches. A non-coincident approach is used in the rate design to capture the different operating characteristics of the member agencies (e.g., the distribution system is designed to meet peak demands in different load areas within the System that have non-coincident demands due to each member agencies unique operating characteristics).

Schedule 6. Classification Percentages

Function	Classification Percentages: Fixed Commodity	Fixed Demand	Fixed Standby	Total % Classified	Comments
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs classified as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs classified as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	54%	24%	22%	100%	Demand percentage represents amount of system conveyance capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remainding conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	54%	24%	22%	100%	
Other	54%	24%	22%	100%	
Storage					
Emergency	0%	0%	100%	100%	Classifies as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Classified as fixed commodity (recovered by Supply Rates)
Regulatory	44%	39%	17%	100%	Classified the same way as distribution.
Treatment	30%	30%	40%	100%	Demand percentage represents amount of system treatment capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same classification is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution	44%	39%	17%	100%	Demand percentage represents amount of system distribution capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same classification is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.

Totals may not foot due to rounding

A summary of cost classification results is shown in Schedule 7. Theclassification of the service function costs results in about 8 percent, or $129 million of the total revenue requirements, being allocated to the demand classification category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to C&A fixed demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

Schedule 7. Service Function Revenue Requirements (by classification category)

Fiscal year ending 2016 Functional categories (by sub-Fuction)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total Classified
Source of Supply						
CRA	$ -	$ 55,683,441	$ -	$ -	$ -	$ 55,683,441
SWP	-	108,900,479	-	-	-	108,900,479
Other Supply	-	13,053,833	-	-	-	13,053,833
Subtotal: Source of Supply	-	177,637,753	-	-	-	**177,637,753**
Conveyance & Aqueduct						
CRA						
CRA Power	-	15,213,042	-	37,020,265	-	52,233,308
CRA All Other	3,541,876	51,816,162	3,325,924	-	-	58,683,962
SWP						
SWP Power	-	-	-	200,401,686	-	200,401,686
SWP All Other	11,650,837	180,484,614	10,940,472	-	-	203,075,923
Other Conveyance & Aqueduct	19,596,238	59,574,978	19,909,080	-	-	99,080,297
Subtotal: Conveyance & Aqueduct	34,788,951	307,088,797	34,175,476	237,421,951	-	**613,475,176**
Storage						
Storage Costs Other Than Power						
Emergency	-	9,888,663	63,879,450	-	-	73,768,113
Drought	-	65,746,763	-	-	-	65,746,763
Regulatory	6,437,787	9,847,436	2,785,275	-	-	19,070,497
Storage Power	-	-	-	(1,577,678)	-	(1,577,678)
Subtotal: Storage	6,437,787	85,482,862	66,664,724	(1,577,678)	-	**157,007,695**
Water Quality						
CRA	-	-	-	-	-	-
SWP	-	-	-	-	-	-
Other	-	-	-	-	-	-
Subtotal: Water Quality	-	-	-	-	-	**-**
Treatment	51,737,722	160,191,964	65,306,631	31,217,846	-	**308,454,163**
Distribution	36,145,652	123,065,588	15,638,226	-	-	**174,849,467**
Demand Management	-	80,519,097	-	-	-	**80,519,097**
Hydroelectric	-	-	-	-	(738,008)	**(738,008)**
Total Costs Classified	**$ 129,110,112**	**$ 933,986,061**	**$ 181,785,058**	**$ 267,062,120**	**$ (738,008)**	**$ 1,511,205,342**

Totals may not foot due to rounding

About 62 percent of the revenue requirement ($934 million) is classified as fixed commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs classified to the Standby category total about $182 million and account for about 12 percent of the revenue requirements. Standby service costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby service. The variable commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are classified as variable commodity costs, total about $267 million, and account for about 18 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

2 Rates and Charges

Schedule 8 provides a cross-reference between the classified service function costs and their allocation to the rate design elements. The specifics of each rate design element are discussed in detail in the following section. Schedule 9 summarizes the rates and charges that would be effective on January 1, 2016 using the assumptions and methodology of this report. Average costs by member agency will vary depending upon an agency's RTS allocation, capacity charge and relative proportions of treated and untreated Tier 1 and Tier 2 purchases.

Schedule 8. Classified Service Function Revenue Requirements (by rate design element)

Fiscal year ending 2016	Rate Design Elements							
Service Function by Classification Category	Supply Rates	System Access Rate	Water Stewardship Rate	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	Total Costs Allocated
Supply								
Fixed Demand	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fixed Commodity	177,637,753	-	-	-	-	-	-	177,637,753
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	177,637,753	-	-	-	-	-	-	177,637,753
Conveyance and Aqueduct								
Fixed Demand	-	-	-	-	-	34,788,951	-	34,788,951
Fixed Commodity	-	307,088,797	-	-	-	-	-	307,088,797
Fixed Standby	-	-	-	-	-	34,175,476	-	34,175,476
Variable Commodity	-	-	-	237,421,951	-	-	-	237,421,951
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Conveyance and Aqueduct	-	307,088,797	-	237,421,951	-	68,964,427	-	613,475,176
Storage								
Fixed Demand	-	-	-	-	6,437,787	-	-	6,437,787
Fixed Commodity	65,746,763	19,736,099	-	-	-	-	-	85,482,862
Fixed Standby	-	-	-	-	-	66,664,724	-	66,664,724
Variable Commodity	(1,577,678)	-	-	-	-	-	-	(1,577,678)
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Storage	64,169,086	19,736,099	-	-	6,437,787	66,664,724	-	157,007,695
Treatment								
Fixed Demand	-	-	-	-	-	-	51,737,722	51,737,722
Fixed Commodity	-	-	-	-	-	-	160,191,964	160,191,964
Fixed Standby	-	-	-	-	-	-	65,306,631	65,306,631
Variable Commodity	-	-	-	-	-	-	31,217,846	31,217,846
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Treatment	-	-	-	-	-	-	308,454,163	308,454,163
Distribution								
Fixed Demand	-	-	-	-	36,145,652	-	-	36,145,652
Fixed Commodity	-	123,065,588	-	-	-	-	-	123,065,588
Fixed Standby	-	-	-	-	-	15,638,226	-	15,638,226
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	(738,008)	-	-	-	-	-	(738,008)
Subtotal: Distribution	-	122,327,579	-	-	36,145,652	15,638,226	-	174,111,458
Demand Management								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	80,519,097	-	-	-	-	80,519,097
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	80,519,097	-	-	-	-	80,519,097
Total								
Fixed Demand	-	-	-	-	42,583,439	34,788,951	51,737,722	129,110,112
Fixed Commodity	243,384,516	449,890,484	80,519,097	-	-	-	160,191,964	933,986,061
Fixed Standby	-	-	-	-	-	116,478,427	65,306,631	181,785,058
Variable Commodity	(1,577,678)	-	-	237,421,951	-	-	31,217,846	267,062,120
Hydroelectric	-	(738,008)	-	-	-	-	-	(738,008)
Total	**$ 241,806,838**	**$ 449,152,476**	**$ 80,519,097**	**$ 237,421,951**	**$ 42,583,439**	**$ 151,267,378**	**$ 308,454,163**	**$ 1,511,205,342**

Totals may not foot due to rounding

Schedule 9. Rates and Charges Summary

Effective January 1st	2014	2015	2016
Tier 1 Supply Rate ($/AF)	$148	$158	$156
Tier 2 Supply Rate ($/AF)	$290	$290	$290
System Access Rate ($/AF)	$243	$257	$259
Water Stewardship Rate ($/AF)	$41	$41	$41
System Power Rate ($/AF)	$161	$126	$138
Full Service Untreated Volumetric Cost ($/AF)			
Tier 1	$593	$582	$594
Tier 2	$735	$714	$728
Full Service Exchange Cost ($/AF)	$445	$424	$438
Treatment Surcharge ($/AF)	$297	$341	$348
Full Service Treated Volumetric Cost ($/AF)			
Tier 1	$890	$923	$942
Tier 2	$1,032	$1,055	$1,076
Readiness-to-Serve Charge ($M)	$166	$158	$153
Capacity Charge ($/cfs)	$8,600	$11,100	$10,900

2.1 System Access Rate (SAR)

The SAR is a volumetric[3] system-wide rate levied on each acre-foot of water that moves through the MWD system. The MWD system includes MWD's right to use SWP facilities for transportation of SWP and non-SWP water. All system users (member agency or third party) pay the SAR to use Metropolitan's conveyance and distribution system. To meet the board stated objective to collect all costs in 2015/16, the SAR would increase to $259 per acre-foot. The SAR recovers the cost of providing conveyance and distribution capacity to meet average annual demands. Current estimates indicate that the SAR revenue requirement will be about $449 million in FY 2015/16, or 30 percent of the total revenue requirement.

2.2 Water Stewardship Rate (WSR)

The WSR would remain unchanged at $41 per acre-foot. The WSR recovers the costs of providing financial incentives for existing and future investments in local resources including conservation and recycled water. These investments or incentive payments are identified as the "demand management" service function in the cost of service process. Demand management costs are classified as

[3] A volumetric rate is a charge applied to the actual amount of water delivered.

100 percent fixed commodity costs and are estimated to be about $80 million in FY 2015/16, about 5 percent of the revenue requirement. The WSR is a volumetric rate paid by each acre-foot of water that moves through the Metropolitan system. All system users (member agency or third parties) will pay the same proportional costs for existing and future conservation and recycling investments.

Investments in conservation, recycling, and groundwater recovery decrease the region's overall dependence on imported water supplies from environmentally sensitive areas like the Bay-Delta; increase the overall level of water supply reliability in Southern California; reduce and defer system capacity expansion costs; and create available space to be used to complete water transfers. Because conservation measures and local resource investments reduce the overall level of dependence on the imported water system, more capacity is available in existing facilities for a longer period of time. The space in the system made available by conservation and recycling is open to all system users. Similar to the public benefit charges implemented in the electric and natural gas industries in California after "open access" (customer choice of supplier) was implemented, the regional and statewide benefits of demand management are assessed to all users of the Metropolitan system, regardless of the source of the imported water supply.

The benefits of demand management programs are recognized by section 130.5 of the MWD Act, enacted by S.B. 60 (Stats. 1999, ch. 414), which requires the Metropolitan to "place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." Because Metropolitan is mandated under S.B. 60 to fund water supply programs like conservation and recycling, it is appropriate to recover the costs of supporting these programs on all water moved through the system.

2.3 System Power Rate (SPR)

SPR would increase to $138 per acre-foot in 2016. The SPR is a volumetric rate that recovers the costs of pumping water to Southern California. The SPR recovers the cost of power for both the SWP and CRA. In FY 2015/16 the revenue requirement for the SPR is estimated to be about $237 million, about 16 percent of the total revenue requirement.

2.4 Treatment Surcharge

The treatment surcharge would increase to $348 per acre-foot to collect all treatment costs in 2015/16. The treatment surcharge is a system-wide volumetric rate set to recover the cost of providing treated water service. The treatment surcharge revenue requirement is expected to be about $308 million in FY 2015/16, almost 20 percent of the total revenue requirement. The treatment surcharge recovers all costs associated with providing treated water service, including commodity, demand and standby related costs. Significant capital improvements at Metropolitan's five treatment plants, such as the Ozone Retrofit Program at Weymouth, as well as refurbishments and improvement programs at all five treatment plants result in additional capital financing costs being allocated to the treatment surcharge.

2.5 Capacity Charge

The Capacity Charge would decrease to $10,900 per cubic-foot-second of capacity during calendar year 2016. The decrease is due to the decrease in pay-as-you-go funding of the CIP. The capacity charge is levied on the maximum summer day demand placed on the distribution system between May 1 and September 30 for a three-calendar year period. The three-year period ending December 31,

2014 is used to levy the capacity charge effective January 1, 2016 through December 31, 2016. Demands measured for the purposes of billing the capacity charge include all firm demand, including wheeling service and exchanges.

The capacity charge is intended to pay for the cost of peaking capacity on Metropolitan's distribution system, while providing an incentive for local agencies to decrease their use of the Metropolitan system to meet peak day demands and to shift demands into lower use time periods particularly October through April. Over time, a member agency will benefit from local supply investments and operational strategies that reduce its peak day demand on the system in the form of a lower total capacity charge. The estimated capacity charge to be paid by each member agency in calendar year 2016 will be provided to the Board in April 2015.

2.6 Readiness-to-Serve Charge

The costs of providing standby service, such as emergency storage, are recovered by the RTS. Metropolitan's costs for providing emergency storage capacity within the system are estimated to be about $67 million in FY 2015/16. In addition, to simplify the rate design by reducing the number of separate charges, the demand and standby related costs identified for the conveyance and aqueduct service function, and standby costs for the distribution function, are also allocated to the RTS. These costs are estimated to be about $84million in FY 2015/16. The RTS would decrease to $153million in calendar year 2016. The decrease is due to the decrease in pay-as-you go funding of the CIP.

The RTS is allocated to the member agencies based on each agency's proportional share of a ten-year rolling average of all firm deliveries (including water transfers and exchanges that use Metropolitan system capacity). A ten-year rolling average leads to a relatively stable RTS allocation that reasonably represents an agency's potential long-term need for standby service under different demand conditions. Member agencies that so choose may have a portion of their total RTS obligation offset by standby charge collections levied by Metropolitan on behalf of the member agency. The detailed schedule with an estimate of each agency's RTS obligation for calendar year 2016 will be provided to the Board in April 2015.

2.7 Purchase Order

The Purchase Order determines the amount of water that can be purchased at the Tier 1 rate. The existing Amended and Restated Purchase Order agreements presently in effect expire December 31, 2014. The Purchase Order will be addressed in the second half of 2014.

2.8 Tier 2 supply rate

The Tier 2 Supply Rate reflects Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and conservation. The Tier 2 Supply Rate would remain at its current level of $290 per acre-foot. At an expected average sales level of 1.75 million acre-feet, it is estimated that no acre-feet will be sold at the Tier 2 Supply Rate.

2.9 Tier 1 supply rate

The total revenue requirement for the supply service function is about $242 million in FY 2015/16. The Tier 1 Supply Rate would decrease to $156 per acre-foot in 2016. The Tier 1 Supply Rate is simply calculated as the amount of the total supply revenue requirement that is not recovered by the Tier 2 Supply Rate divided by the estimated amount of Tier 1 water sales. At an expected demand level of about 1.75 MAF, it is estimated that Metropolitan will sell about 1.57MAF at the Tier 1 Supply Rate in 2015/16.The two-tier pricing approach is closely linked to the Purchase Order and a base level of demand. The 2016 Tier 1 Annual Limit for all member agencies will be provided to the Board in April 2015.

3 Sales

Staff estimates of water sales used for developing the rate recommendation were based on current member agency demands and information and an expectation that demands will trend to levels expected under normal weather conditions. Since 1989/90, total sales have averaged about 2.00 MAF per year, ranging from a high of around 2.5 MAF in 1989/90 to a low of about 1.5 MAF in 1997/98. In 2015/16, water sales are projected to be 1.75 MAF. Treated water sales are projected to be 898 TAF in 2015/16, and Exchanges 179 TAF.

4 Proof of Revenue

Based on expected sales of 1.75 MAF the expected revenues would be about $8.7 million higher than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost-of-service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements, but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2016, the expected revenues for 2015/16 will be about $4 million lower than the total revenue requirement in 2015/16. The total revenue requirement includes a $0.5million increase in the required reserves for the Revenue Remainder Fund. Draws from the Water Stewardship Fund are $8.8 million and deposits to the Treatment Surcharge Stabilization Fund $0.4 million in 2015/16. Accounting for these adjustments, the deposit to reserves is almost $4.8 million in 2015/16.

Schedule 10. FY 2015/16 Proof of Revenue if Rates Effective for Full Test Year ($ millions)

	Revenues if Rates Effective July 1st	Revenue Requirements	Difference	% Over (Under) Collected
Supply	245.1	241.8	3.3	1%
System Access Rate	453.3	449.2	4.1	1%
Water Stewardship Rate	71.8	80.5	(8.8)	-11%
System Power Rate	241.5	237.4	4.1	2%
Treatment Surcharge	312.4	308.5	3.9	1%
Readiness-to-serve Charge	153.0	151.3	1.7	1%
Capacity Charge	42.9	42.6	0.3	1%
Total	**1,519.9**	**1,511.2**	**8.7**	**1%**

Totals may not foot due to rounding

Schedule 11. FY 2015/16 Proof of Revenue if Rates Effective January 1 ($ millions)

	Revenues if Rates Effective Jan 1	Revenue Requirements	Difference	% Over (Under) Collected
Supply	246.9	241.8	5.1	2%
System Access Rate	451.3	449.2	2.1	0%
Water Stewardship Rate	71.8	80.5	(8.8)	-11%
System Power Rate	229.6	237.4	(7.8)	-3%
Treatment Surcharge	308.9	308.5	0.4	0%
Readiness-to-serve Charge	155.5	151.3	4.2	3%
Capacity Charge	43.3	42.6	0.7	2%
Total	**1,507.2**	**1,511.2**	**(4.0)**	**0%**

Totals may not foot due to rounding

Metropolitan Water District of Southern California

Fiscal Year 2014/15 Cost of Service Option 2

April2014

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List of Schedules and Tables

1 Cost of Service

Prior to discussing the specific rates and charges that make up the rate structure, it is important to understand the cost of service process that supports the rates and charges. The purpose of the cost of service process is to: (1) identify which costs should be recovered through rates and charges; (2) organize Metropolitan's costs into service functions; (3) classify service function costs on the basis for which the cost was incurred; and (4) allocate costs to rate elements. The purpose of sorting Metropolitan's costs in a manner that reflects the type of service provided (e.g., supply vs. conveyance), the characteristics of the cost (e.g., fixed or variable) and the reason why the cost was incurred (e.g., to meet peak or average demand) is to create logical cost of service "building blocks". The building blocks can then be arranged to design rates and charges with a reasonable nexus between costs and benefits.

1.1 Cost of Service Process

The general cost of service process involves the four basic steps outlined below.

Step 1 - Development Of Revenue Requirements

In the revenue requirement step, the costs that Metropolitan must recover through rates and charges, after consideration of revenue offsets, are identified. The cash needs approach, an accepted industry practice for government-owned utilities, has historically been used in identifying Metropolitan's revenue requirements and was applied for the purposes of this study. Under the cash needs approach, revenue requirements include operating costs and annual requirements for meeting financed capital items (debt service, funding of replacement and refurbishment from operating revenues, etc.).

Step 2 – Identification Of Service Function Costs

In the functional allocation step, revenue requirements are allocated to different categories based on the operational functions served by each cost. The functional categories are identified in such a way as to allow the development of logical allocation bases. The functional categories used in the cost of service process include:

- Supply
- Conveyance and Aqueduct
- Storage
- Treatment
- Distribution
- Demand Management
- Administrative and General
- Hydroelectric

In order to provide more finite functional allocation, many of these functional categories are subdivided into more detailed sub-functions in the cost of service process. For example, costs for the Supply and Conveyance and Aqueduct functions are further subdivided into the sub-functions State Water Project (SWP), Colorado River Aqueduct (CRA), and Other. Similarly, costs in the Storage function are broken down into the sub-functions Emergency Storage, Drought Carryover Storage, and Regulatory Storage.

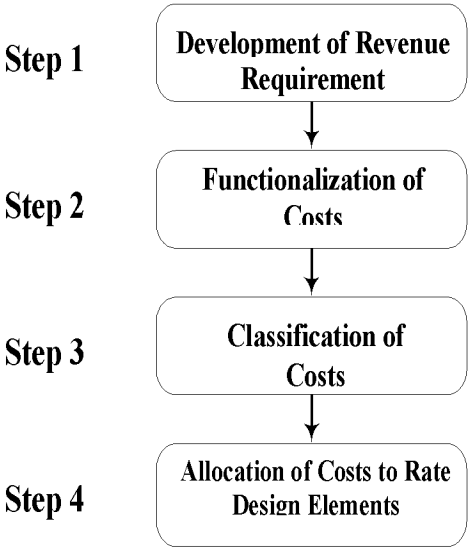
Step 3 - Classification Of Costs

In the cost classification step, functionalized costs are separated into categories according to their causes and behavioral characteristics. Proper cost classification is critical in developing a rate structure that recovers costs in a manner consistent with the causes and behaviors of those costs. Under American Water Works Association (AWWA) guidelines, cost classification may be done using either the Base/Extra-Capacity approach or the Commodity/Demand approach. In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Step 4 - Allocation Of Costs To Rate Design Elements

The allocation of costs to the rate design elements depends on the purpose for which the cost was incurred and the manner in which the member agencies use the Metropolitan system. For example, costs incurred to meet average system demands are typically recovered by dollar per acre-foot rates and are allocated based on the volume of water purchased by each agency. Rates that are levied on the amount or volume of water delivered are commonly referred to as volumetric rates as the customer's costs vary with the volume of water purchased. Costs incurred to meet peak distribution demands (referred to in this report as demand costs) are recovered through a peaking charge (the Capacity Charge) and are allocated to agencies based on their peak summer demand behavior. Costs incurred to provide standby service in the event of an emergency are referred to here as standby costs. Differentiating between costs for average usage and peak usage is just one example of how the cost of service process allows for the design of rates and charges that improves overall customer equity and efficiency. Figure 1 summarizes the cost of service process.

Figure 1. The Cost of Service Process



1.2 Revenue Requirements

The estimated revenue requirements presented in this report are for FY 2014/15. Throughout the report, FY 2014/15 is used as the "test year" to demonstrate the application of the cost of service process. Schedule 1 summarizes the FY 2014/15 revenue requirement by the major budget line items used in Metropolitan's budgeting process. Current estimates indicate Metropolitan's annual expenditures (including capital financing costs, but not construction outlays financed with bond proceeds, if any) will total approximately $1.640billion in FY 2014/15.

The rates and charges do not have to cover this entire amount. Metropolitan generates a significant amount of revenue from interest income, hydroelectric power sales and miscellaneous income. These internally generated revenues are referred to as revenue offsets and are expected to generate about $46 million in FY 2014/15. It is expected that Metropolitan will also generate about $90 million in ad valorem property tax revenues (assuming that ad valorem tax rates are maintained at 0.0035% of assessed valuation). Property tax revenues are used to pay for a portion of Metropolitan's general obligation bond debt service, and a portion of Metropolitan's obligation to pay for debt service on bonds issued to fund the State Water Project (SWP), and other SWP costs. The total revenue offsets for FY 2014/15 are estimated to be around $136 million. Therefore, the revenue required from rates and charges is the difference between the total costs and the revenue offsets, or $1.504 billion. Given an effective date of January 1, 2015, the rates and charges recommended in this report, combined with rates and charges effective through December 31, 2014 will generate a total of $1.479 billion in 2014/15.

All of Metropolitan's costs fall under the broad categories of Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific organizational groups. General District Requirements consist of requirements associated with the Colorado River

Aqueduct (CRA), SWP, the capital financing costs associated with the Capital Investment Plan (CIP), and Water Management Programs. General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code.

When considered in total, General District Requirements make up approximately 71 percent of the absolute value of the allocated costs. The largest component of the revenue requirement relates tothe capital financing program at $564 million, which makes up approximately 32 percent of Metropolitan's FY 2015/16 revenue requirements. Capital financing costs include pay-as-you-go funding of the CIP at $238 million. Metropolitan's SWP costs is the second largest component of the revenue requirement at $496 million, constituting approximately 28 percent of the revenue requirement. Metropolitan's SWP contract requires Metropolitan to pay its allocated share of the capital, minimum operations, maintenance, power and replacement costs incurred to develop and convey its water supply entitlement, irrespective of the quantity of water Metropolitan takes delivery of in any given year. Departmental O&M costs at $386 million make up 22 percent of the total revenue requirement in FY 2014/15. Water System Operations is the largest single component of the Departmental Costs and accounts for 12 percent of the revenue requirements. Water System Operations responsibilities include operating and maintaining Metropolitan's pumping, storage, treatment, and hydroelectric facilities, as well as the CRA and other conveyance and supply facilities.

Schedule 1. Revenue Requirements (by budget line item)

	Fiscal Year Ending 2015	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of the General Manager & Human Resources	$ 25,604,438	1.4%
External Affairs	17,056,198	1.0%
Water System Operations	212,855,716	12.0%
Chief Financial Officer	8,956,070	0.5%
Business Technology & Engineering Services	83,901,805	4.7%
Real Property Development & Mgmt	5,307,024	0.3%
Water Resource Management	16,328,333	0.9%
Ethics Department	992,272	0.1%
General Counsel	12,369,676	0.7%
Audit Department	2,877,181	0.2%
Total	**386,248,712**	**21.8%**
General District Requirements		
State Water Project	495,708,877	27.9%
Colorado River Aqueduct Power	29,178,396	1.6%
Supply Programs	65,524,620	3.7%
Demand Management	62,160,118	3.5%
Capital Financing Program	564,258,865	31.8%
Operating Equipment and Leases	27,462,998	1.5%
Increase (Decrease) in Required Reserves	9,200,000	0.5%
Total	**1,253,493,874**	**70.6%**
Revenue Offsets	**(135,753,166)**	**7.6%**
Net Revenue Requirements	**$ 1,503,989,419**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
Totals may not foot due to rounding

1.3 Service Function Costs

Several major service functions result in the delivery of water to Metropolitan's member agencies. These include the supply itself, the conveyance capacity and energy used to move the supply, storage of water, distribution of supplies within Metropolitan's system, and treatment of these supplies. Metropolitan's rate structure recovers the majority of the cost of providing these functions through rates and charges.

The functional categories developed for Metropolitan's cost of service process are consistent with the AWWA rate setting guidelines, a standard chart of accounts for utilities developed by the National Association of Regulatory Utility Commissioners (NARUC), and the National Council of Governmental Accounting. Because all water utilities are not identical, the rate structure reflects Metropolitan's unique physical, financial, and institutional characteristics, as permitted under the AWWA guidelines.

A key goal of functional allocation is to maximize the degree to which rates and charges reflect the costs of providing different types of service. For functional allocation to be of maximum benefit, two criteria must be kept in mind when establishing functional categories.

- The categories should correlate charges for different types of service with the costs of providing those different types of service; and
- Each function should include reasonable allocation bases by which costs may be allocated.

Each of the functions developed for the cost of service process is described below.

- *Supply.* This function includes costs for those SWP and CRA facilities and programs that relate to maintaining and developing supplies to meet the member agencies' demands. For example, Metropolitan's supply related costs include investments in the Conservation Agreement with the Imperial Irrigation District and the Palo Verde Irrigation District (PVID) Program from the Colorado River supply programs. The SWP programs include transfer programs such as Kern Delta Program, Semitropic Water Storage Program, Yuba Accord Program, and the Arvin-Edison Water Storage Program. Costs for in-basin programs within Metropolitan's service area, such as Conjunctive Use Programsare also included.
- *Conveyance and Aqueduct.* This function includes the capital, operations, maintenance, and overhead costs for SWP and CRA facilities that convey water through Metropolitan's internal distribution system. Variable power costs for the SWP and CRA are also considered to be Conveyance and Aqueduct costs but are separately reported under a "power" sub-function. Conveyance and Aqueduct facilities can be distinguished from Metropolitan's other facilities primarily by the fact that they do not typically include direct connections to the member agencies. For purposes of this study, the Inland Feeder Project functions as an extension of the SWP East Branch and is therefore considered a Conveyance and Aqueduct facility as well.
- *Storage.* Storage costs include the capital financing, operating, maintenance, and overhead costs for Diamond Valley Lake, Lake Mathews, Lake Skinner, and five smaller regulatory reservoirs within the distribution system. Metropolitan's larger storage facilities are operated to provide: (1) emergency storage in the event of an earthquake or similar system outage; (2) drought storage that produces additional supplies during times of shortage; and (3) regulatory storage to balance system demands and supplies and provide for operating

flexibility. To reasonably allocate the costs of storage capacity among member agencies, the storage service function is categorized into sub-functions of emergency, drought, and regulatory storage.

- *Treatment.* This function includes capital financing, operating, maintenance, and overhead costs for Metropolitan's five treatment plants and is considered separately from other costs so that treated water service may be priced separately.
- *Distribution.* This function includes capital financing, operating, maintenance, and overhead costs for the "in-basin" feeders, canals, pipelines, laterals, and other appurtenant works. The "in-basin" facilities are distinguished from Conveyance and Aqueduct facilities at the point of connection to the SWP, Lake Mathews, and other major turnouts along the CRA facilities.
- *Demand Management.* A separate demand management service function has been usedto clearly identify the cost of Metropolitan's investments in local resources like conservation, recycling, and desalination.
- *Administrative and General (A&G).* These costs occur in each of the Groups' departmental budgets and reflect overhead costs that cannot be directly functionalized. The cost-of-service process allocates A&G costs to the service functions based on the labor costs of non-A&G dollars allocated to each function.
- *Hydroelectric.* Hydroelectric costs include the capital financing, operating, maintenance, and overhead costs incurred to operate the 16 small hydroelectric plants located throughout the water distribution system.

1.3.1 Functional Allocation Bases

The functional allocation bases are used to allocate costs to the various service functions. The primary functional allocation bases used in the cost-of-service process are listed below.

- Direct assignment
- Net Book Value plus Work-In-Progress
- Prorating in proportion to other allocations
- Manager analysis
- Prior year results

Schedule 2 summarizes the amounts of total cost allocated using each of the above types of allocation bases.

Schedule 2. Summary of Functional Allocations by Type of Allocation Basis

Primary Functional Allocation Bases		Estimated for FY 2015	% of Allocated Dollars
Direct Assignment	$	914,717,554	51.5%
Net Book Value/Work in Progress		609,268,845	34.3%
Prorating		75,619,026	4.3%
Manager Analysis		35,097,356	2.0%
Prior-Year Results		75,268,351	4.2%
Other	$	65,524,620	3.7%
Total Dollars Allocated	**$**	**1,775,495,752**	**100.0%**
Portion of Above Allocations Relating to:			
Revenue Requirements before Offsets		1,639,742,586	
Revenue Offsets		135,753,166	
Total Dollars Allocated	**$**	**1,775,495,752**	

Totals may not foot due to rounding

Each of the primary allocation bases is discussed in detail in the remainder of this section. Discussion of each allocation basis includes examples of costs allocated using that particular basis.

(a) Direct assignment

Direct assignment makes use of a clear and direct connection between a revenue requirement and the function being served by that revenue requirement. Directly assigned costs typically include: Costs associated with specific treatment plants, purely administrative costs, and certain distribution and conveyance departmental costs. Examples of costs that are directly assigned to specific functional categories are given below.

* Water System Operations Group departmental costs for treatment plants are directly assigned to treatment.
* Transmission charges for State Water Contract are directly assigned to conveyance SWP.

(b) Net Book ValuePlus Work-In-Progress

Capital financing costs, including debt service and funding replacements and refurbishments from operating revenues, comprise about 32percent of Metropolitan's annual revenue requirements. One approach would be to allocate payments on each debt issue in direct proportion to specific project expenditures made using bond proceeds. But, this approach would result in a high degree of volatility in relative capital cost allocations from year to year.
The approach used in this analysis is one widely used in water industry cost of service studies. Capital and debt-related costs (including repair and replacement costs paid from current revenues) are allocated on the basis of the relative net book values of fixed assets plus work in progress for assets under construction within each functional category. This approach produces capital cost allocations that are consistent with the functional distribution of assets. Also, since the allocation basis is tied to fixed asset records rather than debt payment records, the resulting allocations are more reflective of the true useful lives of assets. Use of net book values as an allocation basis provides an improved matching of functional costs with asset lives. A listing of fixed asset net book values summarized by asset function is shown in Schedule 3.

Schedule 3. Net Book Value and Work in Progress Allocation Base

Functional Categories	NBV for FY 2015	% of Total NBV
Source of Supply	$ 30,700,042	0.4%
Conveyance & Aqueduct	1,821,106,630	21.4%
Storage	2,163,558,220	25.4%
Treatment	2,640,203,625	31.0%
Distribution	1,415,131,452	16.6%
Administrative & General	324,056,000	3.8%
Hydroelectric	133,033,516	1.6%
Total Fixed Assets Net Book Value	**$ 8,527,789,487**	**100.0%**

Totals may not foot due to rounding

In most instances, the cost-of-service process uses net book value*plus* work-in-progress to develop allocation bases for debt and capital costs. Examples of revenue requirements allocated using these net book valueand work-in-progress allocations are shown below.

* Revenue Bond Debt Service: *allocated using Net Book Value plus Work In Progress.*
* Annual deposit of operating revenue to replacement and refurbishment fund: *allocated using Net Book Value plus Work In Progress.*

To calculate the relative percentage of fixed assets in each functional category, Metropolitan staff conducted a detailed analysis of historical accounting records and built a database of fixed asset accounts that contains records for all facilities currently in service and under construction. Each facility was sorted into the major service function that best represented the facilities primary purpose and was then further categorized into the appropriate sub-functions described earlier.

(c) Prorating in proportion to other allocations

Utility cost of service studies frequently contain line items for which it would be difficult to identify an allocation basis specific to that line item. In these cases, the most logical allocation basis is often a prorata blend of allocation results calculated for other revenue requirements in the same departmental group, or general category. Reasonable prorata allocations are based on a logical nexus between a cost and the purpose which it serves. For example: Human Resources Section costs are allocated using all labor costs, since Human Resources spends its time and resources attending to the labor force.

(d) Manager analyses

The functional interrelationships of some organizational units are so complex and/or dynamic that reliable allocation bases can only be developed with extensive input from the organization's managers. In these cases, managers use their firsthand knowledge of the organization's internal operations to generate a functional analysis of departmental costs. For example, Fleet Services Unit costs are allocated to treatment, storage, conveyance and distribution based on vehicle count by location.

(e) Prior year results

If available, accounting data for the prior fiscal year by appropriation are used to functionalize Departmental O&M costs for several units or sections. Many of the appropriations parallel the service functions used in the cost of service. For example, Conveyance and Distribution Section costs are allocated to distribution, hydroelectric, and conveyance functions based on the prior year accounting data by appropriation.

A summary of the functional allocation results is shown in Schedules 4 and 5. Schedule 4 provides a breakdown of the revenue requirement for FY 2014/15 into the major service functions and sub-functions prior to the redistribution of administrative and general costs. Schedule 5 serves as a cross-reference summarizing how the budget line items are distributed among the service functions. The largest functional component of Metropolitan's revenue requirement is the Conveyance and Aqueduct function, which constitutes approximately 36 percent of the allocated revenue requirement.

Schedule 4. Revenue Requirement (by service function)

Functional Categories	Fiscal Year Ending 2015	% of Allocated Dollars (1)
Source of Supply		
CRA	$ 47,179,569	3.1%
SWP	101,113,391	6.7%
Other Supply	11,737,880	0.8%
Total	**160,030,840**	**10.6%**
Conveyance & Aqueduct		
CRA		
CRA Power (net of sales)	42,658,601	2.8%
CRA All Other	52,900,831	3.5%
SWP		
SWP Power	184,405,126	12.2%
SWP All Other	175,793,315	11.6%
Other Conveyance & Aqueduct	96,833,789	6.4%
Total	**552,591,662**	**36.5%**
Storage		
Storage Costs Other Than Power		
Emergency	74,027,834	4.9%
Drought	62,292,494	4.1%
Regulatory	18,505,694	1.2%
Wadsworth plant pumping/generation	(1,425,574)	0.1%
Total	**153,400,448**	**10.3%**
Treatment		
Jensen	61,635,381	4.1%
Weymouth	61,107,678	4.0%
Diemer	60,989,576	4.0%
Mills	32,024,649	2.1%
Skinner	69,323,310	4.6%
Total	**285,080,594**	**18.8%**
Distribution	161,188,182	10.7%
Demand Management	72,652,536	4.8%
Hydroelectric	(2,765,349)	0.2%
Administrative & General	121,810,506	8.1%
Total Functional Allocations:	**$ 1,503,989,419**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
Totals may not foot due to rounding

Schedule 5. Service Function Revenue Requirements (by budget line item)

Fiscal Year Ending 2015	Source of Supply	Conveyance & Aqueduct	Storage	Water Quality	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total $ Allocated
Departmental Operations & Maintenance										
Office of the General Manager & Human Resources	$ 1,207,446	$ 8,890,537	$ 804,377	$ -	$ 4,405,392	$ 3,016,462	$ 371,837	$ 293,525	$ 6,614,861	$ 25,604,438
External Affairs	-	-	-	-	-	-	2,899,604	-	14,156,594	17,056,198
Water System Operations	12,395,861	37,908,946	3,483,044	-	96,038,409	56,738,335	8,181	5,343,427	939,514	212,855,716
Chief Financial Officer	-	-	-	-	-	-	-	-	8,956,070	8,956,070
Business Technology & Engineering Services	2,452,792	10,624,123	9,094,017	-	17,749,543	10,786,617	722,436	1,033,366	31,438,910	83,901,805
Real Property Development & Mgmt	-	-	5,307,024	-	-	-	-	-	-	5,307,024
Water Resource Management	9,374,492	-	-	-	128,794	1,152,536	5,479,140	-	193,370	16,328,333
Ethics Department	-	-	-	-	-	-	-	-	992,272	992,272
General Counsel	-	-	-	-	-	-	-	-	12,369,676	12,369,676
Audit Department	-	-	-	-	-	-	-	-	2,877,181	2,877,181
Total Departmental O&M	25,430,591	57,423,606	18,688,462	-	118,322,138	71,693,950	9,481,199	6,670,318	78,538,449	386,248,712
General District Requirements										
State Water Project	78,539,665	417,169,212	-	-	-	-	-	-	-	495,708,877
Colorado River Aqueduct Power	-	29,178,396	-	-	-	-	-	-	-	29,178,396
Supply Programs	65,524,620	-	-	-	-	-	-	-	-	65,524,620
Demand Management	-	-	-	-	-	-	62,160,118	-	-	62,160,118
Capital Financing Program	1,947,949	115,551,057	137,279,956	-	174,694,545	105,782,567	-	8,441,111	20,561,681	564,258,865
Other Operating Costs	581,869	1,181,728	387,630	-	2,122,962	1,453,636	1,729,189	141,450	19,864,534	27,462,998
Increase (Decrease) in Required Reserves	-	-	-	-	-	-	-	-	9,200,000	9,200,000
Total General District Requirements	146,594,103	563,080,393	137,667,586	-	176,817,507	107,236,203	63,889,306	8,582,561	49,626,215	1,253,493,874
Revenue Offsets	(11,993,853)	(67,912,337)	(2,955,600)	-	(10,059,051)	(17,741,971)	(717,969)	(18,018,227)	(6,354,158)	(135,753,166)
Net Revenue Requirements	**$ 160,030,840**	**$ 552,591,662**	**$ 153,400,448**	**$ -**	**$ 285,080,594**	**$ 161,188,182**	**$ 72,652,536**	**$ (2,765,349)**	**$ 121,810,506**	**$ 1,503,989,419**

Totals may not foot due to rounding

1.4 Classified Costs

In the cost classification step, functionalized costs are further categorized based on the causes and behavioral characteristics of these costs. An important part of the classification process is identifying which costs are incurred to meet average demands vs. peak demands and which costs are incurred to provide standby service. As with the functional allocation process, the proposed classification process is consistent with AWWA guidelines, but has been tailored to meet Metropolitan's specific operational structure and service environment.

Two methods are discussed in the AWWA M1 Manual, Principles of Water Rates, Fees and Charges. These two methods are the Commodity/Demand method and the Base/Extra Capacity method.

In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand method allocates costs that vary with the amount of water produced to the commodity category with all other costs associated with water production allocated to the demand category. In the Base/Extra Capacity method, costs related to average demand conditions are allocated to the base category, and capacity costs associated with meeting above average demand conditions are allocated to the extra capacity category.

The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Classification categories used in the analysis include:

- Fixed demand costs
- Fixed commodity costs
- Fixed standby costs
- Variable commodity costs
- Hydroelectric costs

Demand costs are incurred to meet peak demands. Only the direct capital financing costs were included in the demand classification category. A portion of capital financing costs was included in the demand cost category because in order to meet peak demands additional physical capacity is designed into the system and, therefore, additional capital costs are incurred. Commodity costs are generally costs that tend to vary with the amount of water produced. Variable commodity costs include costs of chemicals, most power costs, and other cost components that increase or decrease in relation to the volume of water supplied. Fixed commodity costs include fixed operations and maintenance and capital financing costs that are not related to accommodating peak demands or standby service.

Standby service costs relate to Metropolitan's role in ensuring system reliability during emergencies such as an earthquake or an outage of a major facility like the Colorado River Aqueduct. The standby costs identified include the emergency storage capacity within the system, and the standby capacity within the conveyance and distribution systems.

An additional component used in Metropolitan's cost classification process is the hydroelectric component. While not a part of most water utilities' cost classification procedures, the hydroelectric classification component is necessary to segregate revenue requirements carried from the hydroelectric function established in the functional allocation process. Hydroelectric revenue requirements are later embedded in the distribution function. Any net revenues generated by the hydroelectric operations offset the distribution costs and reduce the System Access Rate. All users of the distribution system benefit proportionately from the revenue offset provided by the sale of hydroelectric energy.

Schedule 6 provides the classification percentages used to distribute the service function costs into demand, commodity and standby service classification categories. All of the supply costs are classified as fixed commodity costs. Because these particular supply costs have been incurred to provide an amount of annual reliable system yield and not to provide peak demand delivery capability or standby service, they are reasonably treated as fixed commodity costs.

Costs for the Conveyance and Aqueduct (C&A) service function are classified into demand, commodity, and standby categories. Because the capital costs for C&A were incurred to meet all three classification categories, an analysis of C&A capacity usage for the test year was used to determine that 54 percent of the available conveyance capacity varies with the quantity of water produced. A system peak factor[1] of 1.4 was applied to the annual usage to determine that 24 percent of available capacity is used to meet peak monthly deliveries to the member agencies. The remaining portion of C&A, around 22 percent, is used for standby. The same classification percentages are applied to the CRA, SWP, and Other (Inland Feeder) Conveyance and Aqueduct sub-functions. The classification shares reflect the system average use of conveyance capacity and not the usage of individual facilities. All of the Conveyance and Aqueduct energy costs for pumping water to Southern California are classified as variable commodity costs and, therefore, are not shown in Schedule 6 because they carry through the classification step.

Storage service function costs for emergency, drought and regulatory storage are also distributed to the classification categories based on the type of service provided. Emergency storage costs are classified as 100 percent standby related. Emergency storage is a prime example of a cost Metropolitan incurs to ensure the reliability of deliveries to the member agencies. In effect, through the emergency storage capacity in the system, Metropolitan is "standing by" to provide service in the event of a catastrophe such as a major earthquake that disrupts regional conveyance capacity for an extended period of time. Drought carryover storage serves to provide reliable supplies by carrying over surplus supplies from periods of above normal precipitation and snow pack to drought periods when supplies decrease. Drought storage creates supply and is one component of the portfolio of resources that result in a reliable amount of annual system supplies. As a result, drought storage is classified as a fixed commodity cost, in the same manner as Metropolitan's supply costs. Regulatory storage within the Metropolitan system provides operational flexibility in meeting peak demands and flow requirements, essentially increasing the physical distribution capacity. Therefore, regulatory storage is classified in the same manner as distribution costs.

[1] Peak monthly deliveries to the member agencies average about 44 percent more than the average monthly deliveries.

Distribution service function costs were classified as fixed commodity by using projected sales data for the test year. During this period, 44 percent of the system distribution capacity varies with the quantity of water produced. Distribution service function costs were classified as fixed demand by using three years of recorded non-coincident peaks. The difference between the three-year average non-coincident peak and the fixed commodity flows divided by the system capacity, or 39 percent of the distribution capacity, was used to meet peak day demands. Although the Metropolitan distribution system has a great deal of operational flexibility, the total amount of distribution capacity was limited to the historicalpeak non-coincident[2] 24-hour daily flow of all the member agencies. The remaining17 percent of distribution capacity is associated with standby service.

Treatment service function costs were also classified as fixed commodity by using projected treated deliveries to the member agencies for the test year. Treatment fixed demand percentage calculation uses system non-coincident peak factor applied to the test year usage; the remaining capacity is associated with standby service. Total treated water capacity of 4,204 cfs, the total design capacity of all the treatment plants, was used in the calculation. Administrative and general costs have been allocated to the classification categories by service function based on the ratio of classified non-A&G service function costs to total non-A&G service function costs.

[2] The term "non-coincident" means that the peak day flow for each agency may or may not coincide with the peak day system flow. Both non-coincident and coincident approaches to measuring peak demands are used in rate design approaches. A non-coincident approach is used in the rate design to capture the different operating characteristics of the member agencies (e.g., the distribution system is designed to meet peak demands in different load areas within the System that have non-coincident demands due to each member agencies unique operating characteristics).

Schedule 6. Classification Percentages

Function	Classification Percentages: Fixed Commodity	Fixed Demand	Fixed Standby	Total % Classified	Comments
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs classified as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs classified as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	54%	24%	22%	100%	Demand percentage represents amount of system conveyance capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remainding conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	54%	24%	22%	100%	
Other	54%	24%	22%	100%	
Storage					
Emergency	0%	0%	100%	100%	Classifies as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Classified as fixed commodity (recovered by Supply Rates)
Regulatory	44%	39%	17%	100%	Classified the same way as distribution.
Treatment	30%	30%	40%	100%	Demand percentage represents amount of system treatment capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same classification is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution	44%	39%	17%	100%	Demand percentage represents amount of system distribution capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same classification is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.

Totals may not foot due to rounding

A summary of cost classification results is shown in Schedule 7. Theclassification of the service function costs results in about 9 percent, or $132 million of the total revenue requirements, being allocated to the demand classification category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to C&A fixed demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

Schedule 7. Service Function Revenue Requirements (by classification category)

Fiscal year ending 2015 Functional categories (by sub-Fuction)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total Classified
Source of Supply						
CRA	$ -	$ 52,731,995	$ -	$ -	$ -	$ 52,731,995
SWP	-	113,013,130	-	-	-	113,013,130
Other Supply	-	13,119,277	-	-	-	13,119,277
Subtotal: Source of Supply	-	178,864,402	-	-	-	**178,864,402**
Conveyance & Aqueduct						
CRA						
CRA Power	-	15,537,825	-	29,703,438	-	45,241,263
CRA All Other	3,703,484	51,429,163	3,478,744	-	-	58,611,391
SWP						
SWP Power	-	-	-	190,475,288	-	190,475,288
SWP All Other	10,609,602	174,430,657	9,965,776	-	-	195,006,035
Other Conveyance & Aqueduct	21,429,554	62,684,166	21,067,153	-	-	105,180,873
Subtotal: Conveyance & Aqueduct	35,742,640	304,081,811	34,511,673	220,178,726	-	**594,514,850**
Storage						
Storage Costs Other Than Power						
Emergency	-	9,888,824	67,928,282	-	-	77,817,106
Drought	-	69,623,515	-	-	-	69,623,515
Regulatory	6,742,407	10,332,795	2,917,961	-	-	19,993,163
Storage Power	-	-	-	(1,472,501)	-	(1,472,501)
Subtotal: Storage	6,742,407	89,845,135	70,846,243	(1,472,501)	-	**165,961,284**
Water Quality						
CRA	-	-	-	-	-	-
SWP	-	-	-	-	-	-
Other	-	-	-	-	-	-
Subtotal: Water Quality	-	-	-	-	-	**-**
Treatment	53,077,417	159,529,474	65,028,546	30,046,563	-	**307,682,001**
Distribution	36,695,087	123,824,538	15,880,802	-	-	**176,400,426**
Demand Management	-	81,202,801	-	-	-	**81,202,801**
Hydroelectric	-	-	-	-	(636,343)	**(636,343)**
Total Costs Classified	**$ 132,257,551**	**$ 937,348,161**	**$ 186,267,263**	**$ 248,752,788**	**$ (636,343)**	**$ 1,503,989,419**

Totals may not foot due to rounding

About 62 percent of the revenue requirement ($937 million) is classified as fixed commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs classified to the Standby category total about $186 million and account for about 12 percent of the revenue requirements. Standby service costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby service. The variable commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are classified as variable commodity costs, total about $249 million, and account for about 16 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

2 Rates and Charges

Schedule 8 provides a cross-reference between the classified service function costs and their allocation to the rate design elements. The specifics of each rate design element are discussed in detail in the following section. Schedule 9 summarizes the rates and charges that would be effective on January 1, 2015 using the assumptions and methodology of this report. Average costs by member agency will vary depending upon an agency's RTS allocation, capacity charge and relative proportions of treated and untreated Tier 1 and Tier 2 purchases.

Schedule 8. Classified Service Function Revenue Requirements (by rate design element)

Fiscal year ending 2015	Rate Design Elements							
Service Function by Classification Category	Supply Rates	System Access Rate	Water Stewardship Rate	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	Total Costs Allocated
Supply								
Fixed Demand	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fixed Commodity	178,864,402	-	-	-	-	-	-	178,864,402
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	178,864,402	-	-	-	-	-	-	178,864,402
Conveyance and Aqueduct								
Fixed Demand	-	-	-	-	-	35,742,640	-	35,742,640
Fixed Commodity	-	304,081,811	-	-	-	-	-	304,081,811
Fixed Standby	-	-	-	-	-	34,511,673	-	34,511,673
Variable Commodity	-	-	-	220,178,726	-	-	-	220,178,726
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Conveyance and Aqueduct	-	304,081,811	-	220,178,726	-	70,254,313	-	594,514,850
Storage								
Fixed Demand	-	-	-	-	6,742,407	-	-	6,742,407
Fixed Commodity	69,623,515	20,221,619	-	-	-	-	-	89,845,135
Fixed Standby	-	-	-	-	-	70,846,243	-	70,846,243
Variable Commodity	(1,472,501)	-	-	-	-	-	-	(1,472,501)
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Storage	68,151,015	20,221,619	-	-	6,742,407	70,846,243	-	165,961,284
Treatment								
Fixed Demand	-	-	-	-	-	-	53,077,417	53,077,417
Fixed Commodity	-	-	-	-	-	-	159,529,474	159,529,474
Fixed Standby	-	-	-	-	-	-	65,028,546	65,028,546
Variable Commodity	-	-	-	-	-	-	30,046,563	30,046,563
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Treatment	-	-	-	-	-	-	307,682,001	307,682,001
Distribution								
Fixed Demand	-	-	-	-	36,695,087	-	-	36,695,087
Fixed Commodity	-	123,824,538	-	-	-	-	-	123,824,538
Fixed Standby	-	-	-	-	-	15,880,802	-	15,880,802
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	(636,343)	-	-	-	-	-	(636,343)
Subtotal: Distribution	-	123,188,195	-	-	36,695,087	15,880,802	-	175,764,083
Demand Management								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	81,202,801	-	-	-	-	81,202,801
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	81,202,801	-	-	-	-	81,202,801
Total								
Fixed Demand	-	-	-	-	43,437,494	35,742,640	53,077,417	132,257,551
Fixed Commodity	248,487,917	448,127,969	81,202,801	-	-	-	159,529,474	937,348,161
Fixed Standby	-	-	-	-	-	121,238,717	65,028,546	186,267,263
Variable Commodity	(1,472,501)	-	-	220,178,726	-	-	30,046,563	248,752,788
Hydroelectric	-	(636,343)	-	-	-	-	-	(636,343)
Total	**$ 247,015,416**	**$ 447,491,625**	**$ 81,202,801**	**$ 220,178,726**	**$ 43,437,494**	**$ 156,981,357**	**$ 307,682,001**	**$ 1,503,989,419**

Totals may not foot due to rounding

Schedule 9. Rates and Charges Summary

Effective January 1st	2014	2015	2016
Tier 1 Supply Rate ($/AF)	$148	$155	$154
Tier 2 Supply Rate ($/AF)	$290	$290	$290
System Access Rate ($/AF)	$243	$253	$257
Water Stewardship Rate ($/AF)	$41	$41	$41
System Power Rate ($/AF)	$161	$125	$137
Full Service Untreated Volumetric Cost ($/AF)			
Tier 1	$593	$574	$589
Tier 2	$735	$709	$725
Full Service Exchange Cost ($/AF)	$445	$419	$435
Treatment Surcharge ($/AF)	$297	$335	$339
Full Service Treated Volumetric Cost ($/AF)			
Tier 1	$890	$909	$928
Tier 2	$1,032	$1,044	$1,064
Readiness-to-Serve Charge ($M)	$166	$155	$148
Capacity Charge ($/cfs)	$8,600	$10,900	$10,500

2.1 System Access Rate (SAR)

The SAR is a volumetric[3] system-wide rate levied on each acre-foot of water that moves through the MWD system. The MWD system includes MWD's right to use SWP facilities for transportation of SWP and non-SWP water. All system users (member agency or third party) pay the SAR to use Metropolitan's conveyance and distribution system. To meet the board stated objective to collect all costs in 2014/15, the SAR would increase to $253 per acre-foot. The SAR recovers the cost of providing conveyance and distribution capacity to meet average annual demands. Current estimates indicate that the SAR revenue requirement will be about $447 million in FY 2014/15, or 30 percent of the total revenue requirement.

2.2 Water Stewardship Rate (WSR)

The WSR would remain unchanged at $41 per acre-foot. The WSR recovers the costs of providing financial incentives for existing and future investments in local resources including conservation and recycled water. These investments or incentive payments are identified as the "demand management" service function in the cost of service process. Demand management costs are classified as 100 percent fixed commodity costs and are estimated to be about $81 million in FY 2014/15, about 5 percent of the revenue requirement. The WSR is a volumetric rate paid by each acre-foot of water that moves through the Metropolitan system. All system users (member agency or third parties) will pay the same proportional costs for existing and future conservation and recycling investments.

Investments in conservation, recycling, and groundwater recovery decrease the region's overall dependence on imported water supplies from environmentally sensitive areas like the Bay-Delta; increase the overall level of water supply reliability in Southern California; reduce and defer system capacity expansion costs; and create available space to be used to complete water transfers. Because conservation measures and local resource investments reduce the overall level of dependence on the imported water system, more capacity is available in existing facilities for a longer period of time. The space in the system made available by conservation and recycling is open to all system users. Similar to the public benefit charges implemented in the electric and natural gas industries in California after "open access" (customer choice of supplier) was implemented, the regional and statewide benefits of demand management are assessed to all users of the Metropolitan system, regardless of the source of the imported water supply.

The benefits of demand management programs are recognized by section 130.5 of the MWD Act, enacted by S.B. 60 (Stats. 1999, ch. 414), which requires the Metropolitan to "place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." Because Metropolitan is mandated under S.B. 60 to fund water supply programs like conservation and recycling, it is appropriate to recover the costs of supporting these programs on all water moved through the system.

2.3 System Power Rate (SPR)

SPR would decrease to $125 per acre-foot in 2015. The SPR is a volumetric rate that recovers the costs of pumping water to Southern California. The SPR recovers the cost of power for both the SWP and CRA. In FY 2014/15 the revenue requirement for the SPR is estimated to be about $220 million, about 15 percent of the total revenue requirement.

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[3] A volumetric rate is a charge applied to the actual amount of water delivered.

2.4 Treatment Surcharge

The treatment surcharge would increase to $335 per acre-foot to collect all treatment costs in 2014/15. The treatment surcharge is a system-wide volumetric rate set to recover the cost of providing treated water service. The treatment surcharge revenue requirement is expected to be about $308 million in FY 2014/15, almost 21 percent of the total revenue requirement. The treatment surcharge recovers all costs associated with providing treated water service, including commodity, demand and standby related costs. Significant capital improvements at Metropolitan's five treatment plants, such as the Ozone Retrofit Program at Weymouth, as well as refurbishments and improvement programs at all five treatment plants result in additional capital financing costs being allocated to the treatment surcharge.

2.5 Capacity Charge

The Capacity Charge would increase to $10,900 per cubic-foot-second of capacity during calendar year 2015. The increase is due to the increase in pay-as-you-go funding of the CIP, and the increase in the fixed demand classification factor. The capacity charge is levied on the maximum summer day demand placed on the distribution system between May 1 and September 30 for a three-calendar year period. The three-year period ending December 31, 2013 is used to levy the capacity charge effective January 1, 2015 through December 31, 2015. Demands measured for the purposes of billing the capacity charge include all firm demand including wheeling service and exchanges.

The capacity charge is intended to pay for the cost of peaking capacity on Metropolitan's distribution system, while providing an incentive for local agencies to decrease their use of the Metropolitan system to meet peak day demands and to shift demands into lower use time periods particularly October through April. Over time, a member agency will benefit from local supply investments and operational strategies that reduce its peak day demand on the system in the form of a lower total capacity charge. The estimated capacity charge to be paid by each member agency in calendar year 2015is included in Schedule 10.

Schedule 10. Capacity Charge (by member agency)

	Peak Day Demand (cfs) (May 1 through September 30) Calendar Year				Rate ($/cfs): $10,900
AGENCY	2011	2012	2013	3-Year Peak	Calendar Year 2015 Capacity Charge
Anaheim	39.3	38.3	31.3	39.3	$428,370
Beverly Hills	31.5	32.7	30.8	32.7	$356,430
Burbank	21.4	20.9	19.7	21.4	$233,260
Calleguas	210.1	224.0	228.7	228.7	$2,492,830
Central Basin	79.2	74.5	73.6	79.2	$863,280
Compton	2.4	2.3	2.9	2.9	$31,610
Eastern	190.9	237.2	267.4	267.4	$2,914,660
Foothill	19.0	17.6	18.9	19.0	$207,100
Fullerton	27.4	24.4	20.0	27.4	$298,660
Glendale	49.0	41.5	44.9	49.0	$534,100
Inland Empire	138.0	126.7	153.9	153.9	$1,677,510
Las Virgenes	43.4	41.9	43.2	43.4	$473,060
Long Beach	59.9	60.4	66.9	66.9	$729,210
Los Angeles	329.0	512.9	767.1	767.1	$8,361,390
MWDOC	390.1	401.1	381.9	401.1	$4,371,990
Pasadena	50.6	52.1	52.5	52.5	$572,250
San Diego CWA	760.7	961.5	967.4	967.4	$10,544,660
San Fernando	1.6	2.8	4.9	4.9	$53,410
San Marino	1.3	5.3	6.1	6.1	$66,490
Santa Ana	20.0	19.2	19.6	20.0	$218,000
Santa Monica	21.1	19.7	22.7	22.7	$247,430
Three Valleys	122.7	133.0	178.6	178.6	$1,946,740
Torrance	35.5	36.2	34.1	36.2	$394,580
Upper San Gabriel	20.4	15.2	16.1	20.4	$222,360
West Basin	214.6	222.6	230.2	230.2	$2,509,180
Western MWD	179.3	193.7	198.6	198.6	$2,164,740
Total	**3,058.4**	**3,517.8**	**3,882.0**	**3,937.0**	**$42,913,300**

Totals may not foot due to rounding

2.6 Readiness-to-Serve Charge

The costs of providing standby service, such as emergency storage, are recovered by the RTS. Metropolitan's costs for providing emergency storage capacity within the system are estimated to be about $71 million in FY 2014/15. In addition, to simplify the rate design by reducing the number of separate charges, the demand and standby related costs identified for the conveyance and aqueduct service function, and standby costs for the distribution function, are also allocated to the RTS. These costs are estimated to be about $86million in FY 2014/15. The RTS would decrease to $155million in calendar year 2015. The decrease is due to the decrease in the standby classification factor which outweighs the increase in pay-as-you go funding of the CIP.

The RTS is allocated to the member agencies based on each agency's proportional share of a ten-year rolling average of all firm deliveries (including water transfers and exchanges that use Metropolitan system capacity). A ten-year rolling average leads to a relatively stable RTS allocation that

reasonably represents an agency's potential long-term need for standby service under different demand conditions. Member agencies that so choose may have a portion of their total RTS obligation offset by standby charge collections levied by Metropolitan on behalf of the member agency. The estimatedRTS for each member agency for calendar year 2015is shown in Schedule 11.

Schedule 11. Readiness-to-Serve Charge (by member agency)

			Water rate $89.41/acre-foot
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2003/04 - FY2012/13	RTS Share	12 months @ $155 million per year (1/15-12/15)
Anaheim	22,572	1.30%	$ 2,018,023
Beverly Hills	11,524	0.66%	1,030,303
Burbank	12,642	0.73%	1,130,250
Calleguas MWD	109,981	6.34%	9,832,939
Central Basin MWD	56,302	3.25%	5,033,716
Compton	2,538	0.15%	226,939
Eastern MWD	97,935	5.65%	8,755,983
Foothill MWD	10,373	0.60%	927,397
Fullerton	10,147	0.59%	907,174
Glendale	20,503	1.18%	1,833,087
Inland Empire Utilities Agency	60,010	3.46%	5,365,197
Las Virgenes MWD	22,797	1.31%	2,038,157
Long Beach	34,315	1.98%	3,067,942
Los Angeles	289,350	16.69%	25,869,602
Municipal Water District of Orange County	222,281	12.82%	19,873,182
Pasadena	21,669	1.25%	1,937,298
San Diego County Water Authority	393,731	22.71%	35,201,860
San Fernando	138	0.01%	12,320
San Marino	1,002	0.06%	89,567
Santa Ana	13,509	0.78%	1,207,774
Santa Monica	11,001	0.63%	983,517
Three Valleys MWD	68,167	3.93%	6,094,516
Torrance	18,845	1.09%	1,684,843
Upper San Gabriel Valley MWD	17,081	0.99%	1,527,158
West Basin MWD	131,114	7.56%	11,722,387
Western MWD	74,144	4.28%	6,628,867
MWD Total	1,733,668	100.00%	$ 155,000,000

Totals may not foot due to rounding

2.7 Purchase Order

The Purchase Order determines the amount of water that can be purchased at the Tier 1rate. The existing Amended and Restated Purchase Order agreements presently in effect expire December 31, 2014. The Purchase Order will be addressed in the second half of 2014.

2.8 Tier 2 supply rate

The Tier 2 Supply Rate reflects Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate encourages the member agencies and their customers to maintain existing

local supplies and develop cost-effective local supply resources and conservation. The Tier 2 Supply Rate would remain at its current level of $290 per acre-foot. At an expected average sales level of 1.75 million acre-feet, it is estimated that no acre-feet will be sold at the Tier 2 Supply Rate.

2.9 Tier 1 supply rate

The total revenue requirement for the supply service function is about $247 million in FY 2014/15. The Tier 1 Supply Rate would be increased to $155 per acre-foot in 2015. The Tier 1 Supply Rate is simply calculated as the amount of the total supply revenue requirement that is not recovered by the Tier 2 Supply Rate divided by the estimated amount of Tier 1 water sales. At an expected demand level of about 1.75 MAF, it is estimated that Metropolitan will sell 1.57MAF at the Tier 1 Supply Rate in 2014/15.
The two-tier pricing approach is closely linked to the Purchase Order and a base level of demand. The 2015 Tier 1 Annual Limit for all member agencies will be provided to the Board later in 2014.

3 Sales

Staff estimates of water sales used for developing the rate recommendation were based on current member agency demands and information and an expectation that demands will trend to levels expected under normal weather conditions. Since 1989/90, total sales have averaged about 2.00 MAF per year, ranging from a high of around 2.5 MAF in 1989/90 to a low of about 1.5 MAF in 1997/98. In 2014/15, water sales are projected to be 1.75 MAF. Treated water sales are projected to be 910TAF in 2014/15 and Exchanges 181 TAF.

4 Proof of Revenue

Based on expected sales of 1.75 MAF the expected revenues would be about $24.7 million lower than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost-of-service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements, but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2015, the expected revenues for 2014/15 will be about $24.9million lower than the total revenue requirement in 2014/15. The total revenue requirement includes a $2.1million increase in the required reserves for the Revenue Remainder Fund. Draws from the Water Stewardship Fund and Treatment Surcharge Stabilization Fund are $9.5 million and $4.4 million respectively in 2014/15. Accounting for these adjustments, the required draw from reserves is almost $9 million in 2014/15.

Schedule 12. FY 2014/15 Proof of Revenue if Rates Effective for Full Test Year ($ millions)

	Revenues if Rates Effective July 1st	Revenue Requirements	Difference	% Over (Under) Collected
Supply	243.2	247.0	(3.8)	-2%
System Access Rate	442.8	447.5	(4.7)	-1%
Water Stewardship Rate	71.8	81.2	(9.5)	-12%
System Power Rate	218.8	220.2	(1.4)	-1%
Treatment Surcharge	304.9	307.7	(2.8)	-1%
Readiness-to-serve Charge	155.0	157.0	(2.0)	-1%
Capacity Charge	42.9	43.4	(0.5)	-1%
Total	**1,479.2**	**1,504.0**	**(24.7)**	**-2%**

Totals may not foot due to rounding

Schedule 13. FY 2014/15 Proof of Revenue if Rates Effective January 1 ($ millions)

	Revenues if Rates Effective Jan 1	Revenue Requirements	Difference	% Over (Under) Collected
Supply	237.1	247.0	(10.0)	-4%
System Access Rate	433.0	447.5	(14.5)	-3%
Water Stewardship Rate	71.8	81.2	(9.5)	-12%
System Power Rate	253.7	220.2	33.6	15%
Treatment Surcharge	285.9	307.7	(21.7)	-7%
Readiness-to-serve Charge	160.5	157.0	3.5	2%
Capacity Charge	37.1	43.4	(6.3)	-15%
Total	**1,479.1**	**1,504.0**	**(24.9)**	**-2%**

Totals may not foot due to rounding

Metropolitan Water District of Southern California

Fiscal Year 2015/16Cost of Service Option 2

April2014

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List of Schedules and Tables

1 Cost of Service

Prior to discussing the specific rates and charges that make up the rate structure, it is important to understand the cost of service process that supports the rates and charges. The purpose of the cost of service process is to: (1) identify which costs should be recovered through rates and charges; (2) organize Metropolitan's costs into service functions; (3) classify service function costs on the basis for which the cost was incurred; and (4) allocate costs to rate elements. The purpose of sorting Metropolitan's costs in a manner that reflects the type of service provided (e.g., supply vs. conveyance), the characteristics of the cost (e.g., fixed or variable) and the reason why the cost was incurred (e.g., to meet peak or average demand) is to create logical cost of service "building blocks". The building blocks can then be arranged to design rates and charges with a reasonable nexus between costs and benefits.

1.1 Cost of Service Process

The general cost of service process involves the four basic steps outlined below.

Step 1 - Development Of Revenue Requirements

In the revenue requirement step, the costs that Metropolitan must recover through rates and charges, after consideration of revenue offsets, are identified. The cash needs approach, an accepted industry practice for government-owned utilities, has historically been used in identifying Metropolitan's revenue requirements and was applied for the purposes of this study. Under the cash needs approach, revenue requirements include operating costs and annual requirements for meeting financed capital items (debt service, funding of replacement and refurbishment from operating revenues, etc.).

Step 2 – Identification Of Service Function Costs

In the functional allocation step, revenue requirements are allocated to different categories based on the operational functions served by each cost. The functional categories are identified in such a way as to allow the development of logical allocation bases. The functional categories used in the cost of service process include:

- Supply
- Conveyance and Aqueduct
- Storage
- Treatment
- Distribution
- Demand Management
- Administrative and General
- Hydroelectric

In order to provide more finite functional allocation, many of these functional categories are subdivided into more detailed sub-functions in the cost of service process. For example, costs for the Supply and Conveyance and Aqueduct functions are further subdivided into the sub-functions State Water Project (SWP), Colorado River Aqueduct (CRA), and Other. Similarly, costs in the Storage function are broken down into the sub-functions Emergency Storage, Drought Carryover Storage, and Regulatory Storage.

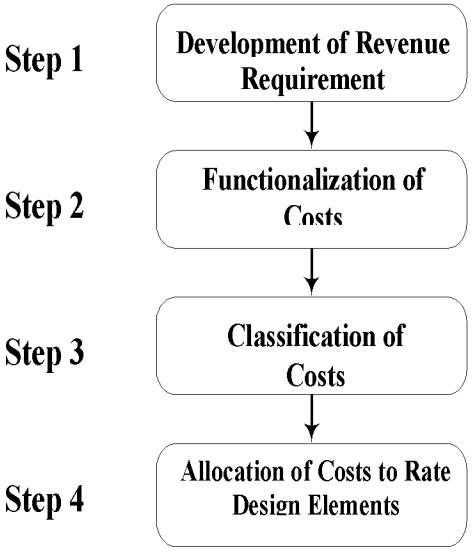
Step 3 - Classification Of Costs

In the cost classification step, functionalized costs are separated into categories according to their causes and behavioral characteristics. Proper cost classification is critical in developing a rate structure that recovers costs in a manner consistent with the causes and behaviors of those costs. Under American Water Works Association (AWWA) guidelines, cost classification may be done using either the Base/Extra-Capacity approach or the Commodity/Demand approach. In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Step 4 - Allocation Of Costs To Rate Design Elements

The allocation of costs to the rate design elements depends on the purpose for which the cost was incurred and the manner in which the member agencies use the Metropolitan system. For example, costs incurred to meet average system demands are typically recovered by dollar per acre-foot rates and are allocated based on the volume of water purchased by each agency. Rates that are levied on the amount or volume of water delivered are commonly referred to as volumetric rates as the customer's costs vary with the volume of water purchased. Costs incurred to meet peak distribution demands (referred to in this report as demand costs) are recovered through a peaking charge (the Capacity Charge) and are allocated to agencies based on their peak summer demand behavior. Costs incurred to provide standby service in the event of an emergency are referred to here as standby costs. Differentiating between costs for average usage and peak usage is just one example of how the cost of service process allows for the design of rates and charges that improves overall customer equity and efficiency. Figure 1 summarizes the cost of service process.

Figure 1. The Cost of Service Process



1.2 Revenue Requirements

The estimated revenue requirements presented in this report are for FY 2015/16. Throughout the report, FY 2015/16 is used as the "test year" to demonstrate the application of the cost of service process. Schedule 1 summarizes the FY 2015/16 revenue requirement by the major budget line items used in Metropolitan's budgeting process. Current estimates indicate Metropolitan's annual expenditures (including capital financing costs, but not construction outlays financed with bond proceeds, if any) will total approximately $1.642 billion in FY 2015/16.

The rates and charges do not have to cover this entire amount. Metropolitan generates a significant amount of revenue from interest income, hydroelectric power sales and miscellaneous income. These internally generated revenues are referred to as revenue offsets and are expected to generate about $58 million in FY 2015/16. It is expected that Metropolitan will also generate about $92 million in ad valorem property tax revenues (assuming that ad valorem tax rates are maintained at 0.0035% of assessed valuation). Property tax revenues are used to pay for a portion of Metropolitan's general obligation bond debt service, a portion of Metropolitan's obligation to pay for debt service on bonds issued to fund the State Water Project (SWP), and other SWP costs. The total revenue offsets for FY 2015/16 are estimated to be around $150 million. Therefore, the revenue required from rates and charges is the difference between the total costs and the revenue offsets, or $1.493 billion. Given an effective date of January 1, 2016, the rates and charges recommended in this report, combined with rates and charges effective through December 31, 2015 will generate a total of $1.484 billion in 2015/16.

All of Metropolitan's costs fall under the broad categories of Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific organizational groups. General District Requirements consist of requirements associated with the Colorado River

Aqueduct (CRA), SWP, the capital financing costs associated with the Capital Investment Plan (CIP), and Water Management Programs. General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code.

When considered in total, General District Requirements make up approximately 70 percent of the absolute value of the allocated costs. The largest component of the revenue requirement relates tothe capital financing program at $524 million, which makes up approximately 29 percent of Metropolitan's FY 2015/16 revenue requirements. Capital financing costs include pay-as-you-go funding of the CIP at $200 million. Metropolitan's SWP costsis the second largest component of the revenue requirement at $515 million, constituting approximately 29 percent of the revenue requirement. Metropolitan's SWP contract requires Metropolitan to pay its allocated share of the capital, minimum operations, maintenance, power and replacement costs incurred to develop and convey its water supply entitlement, irrespective of the quantity of water Metropolitan takes delivery of in any given year. Departmental O&M costs at $391 million make up 22 percent of the total revenue requirement in FY 2015/16. Water System Operations is the largest single component of the Departmental Costs and accounts for 12 percent of the revenue requirements. Water System Operations responsibilities include operating and maintaining Metropolitan's pumping, storage, treatment, and hydroelectric facilities, as well as the CRA and other conveyance and supply facilities.

Schedule 1. Revenue Requirements (by budget line item)

	Fiscal Year Ending 2016	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of the General Manager & Human Resources	$ 25,768,716	1.4%
External Affairs	17,188,606	1.0%
Water System Operations	215,676,523	12.0%
Chief Financial Officer	9,187,432	0.5%
Business Technology & Engineering Services	84,984,360	4.7%
Real Property Development & Mgmt	5,289,803	0.3%
Water Resource Management	16,340,755	0.9%
Ethics Department	990,943	0.1%
General Counsel	12,598,621	0.7%
Audit Department	2,925,708	0.2%
Total	**390,951,466**	**21.8%**
General District Requirements		
State Water Project	515,004,362	28.7%
Colorado River Aqueduct Power	36,503,152	2.0%
Supply Programs	66,451,886	3.7%
Demand Management	61,654,768	3.4%
Capital Financing Program	524,707,370	29.3%
Operating Equipment and Leases	26,634,780	1.5%
Increase (Decrease) in Required Reserves	20,300,000	1.1%
Total	**1,251,256,317**	**69.8%**
Revenue Offsets	**(149,525,981)**	**8.3%**
Net Revenue Requirements	**$ 1,492,681,803**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
Totals may not foot due to rounding

1.3 Service Function Costs

Several major service functions result in the delivery of water to Metropolitan's member agencies. These include the supply itself, the conveyance capacity and energy used to move the supply, storage of water, distribution of supplies within Metropolitan's system, and treatment of these supplies. Metropolitan's rate structure recovers the majority of the cost of providing these functions through rates and charges.

The functional categories developed for Metropolitan's cost of service process are consistent with the AWWA rate setting guidelines, a standard chart of accounts for utilities developed by the National Association of Regulatory Utility Commissioners (NARUC), and the National Council of Governmental Accounting. Because all water utilities are not identical, the rate structure reflects Metropolitan's unique physical, financial, and institutional characteristics, as permitted under the AWWA guidelines.

A key goal of functional allocation is to maximize the degree to which rates and charges reflect the costs of providing different types of service. For functional allocation to be of maximum benefit, two criteria must be kept in mind when establishing functional categories.

- The categories should correlate charges for different types of service with the costs of providing those different types of service; and
- Each function should include reasonable allocation bases by which costs may be allocated.

Each of the functions developed for the cost of service process is described below.

- *Supply.* This function includes costs for those SWP and CRA facilities and programs that relate to maintaining and developing supplies to meet the member agencies' demands. For example, Metropolitan's supply related costs include investments in the Conservation Agreement with the Imperial Irrigation District and the Palo Verde Irrigation District (PVID) Program from the Colorado River supply programs. The SWP programs include transfer programs such as Kern Delta Program, Semitropic Water Storage Program, Yuba Accord Program, and the Arvin-Edison Water Storage Program. Costs for in-basin programs within Metropolitan's service area, such as Conjunctive Use Programsare also included.
- *Conveyance and Aqueduct.* This function includes the capital, operations, maintenance, and overhead costs for SWP and CRA facilities that convey water through Metropolitan's internal distribution system. Variable power costs for the SWP and CRA are also considered to be Conveyance and Aqueduct costs but are separately reported under a "power" sub-function. Conveyance and Aqueduct facilities can be distinguished from Metropolitan's other facilities primarily by the fact that they do not typically include direct connections to the member agencies. For purposes of this study, the Inland Feeder Project functions as an extension of the SWP East Branch and is therefore considered a Conveyance and Aqueduct facility as well.
- *Storage.* Storage costs include the capital financing, operating, maintenance, and overhead costs for Diamond Valley Lake, Lake Mathews, Lake Skinner, and five smaller regulatory reservoirs within the distribution system. Metropolitan's larger storage facilities are operated to provide: (1) emergency storage in the event of an earthquake or similar system outage; (2) drought storage that produces additional supplies during times of shortage; and (3) regulatory storage to balance system demands and supplies and provide for operating

flexibility. To reasonably allocate the costs of storage capacity among member agencies, the storage service function is categorized into sub-functions of emergency, drought, and regulatory storage.

- *Treatment.* This function includes capital financing, operating, maintenance, and overhead costs for Metropolitan's five treatment plants and is considered separately from other costs so that treated water service may be priced separately.
- *Distribution.* This function includes capital financing, operating, maintenance, and overhead costs for the "in-basin" feeders, canals, pipelines, laterals, and other appurtenant works. The "in-basin" facilities are distinguished from Conveyance and Aqueduct facilities at the point of connection to the SWP, Lake Mathews, and other major turnouts along the CRA facilities.
- *Demand Management.* A separate demand management service function has been usedto clearly identify the cost of Metropolitan's investments in local resources like conservation, recycling, and desalination.
- *Administrative and General (A&G).* These costs occur in each of the Groups' departmental budgets and reflect overhead costs that cannot be directly functionalized. The cost-of-service process allocates A&G costs to the service functions based on the labor costs of non-A&G dollars allocated to each function.
- *Hydroelectric.* Hydroelectric costs include the capital financing, operating, maintenance, and overhead costs incurred to operate the 16 small hydroelectric plants located throughout the water distribution system.

1.3.1 Functional Allocation Bases

The functional allocation bases are used to allocate costs to the various service functions. The primary functional allocation bases used in the cost-of-service process are listed below.

- Direct assignment
- Net Book Value plus Work-In-Progress
- Prorating in proportion to other allocations
- Manager analysis
- Prior year results

Schedule 2 summarizes the amounts of total cost allocated using each of the above types of allocation bases.

Schedule 2. Summary of Functional Allocations by Type of Allocation Basis

Primary Functional Allocation Bases	Estimated for FY 2016	% of Allocated Dollars
Direct Assignment	$ 955,842,911	53.3%
Net Book Value/Work in Progress	570,851,933	31.9%
Prorating	87,548,935	4.9%
Manager Analysis	35,315,288	2.0%
Prior-Year Results	75,722,811	4.2%
Other	$ 66,451,886	3.7%
Total Dollars Allocated	**$ 1,791,733,765**	**100.0%**
Portion of Above Allocations Relating to:		
Revenue Requirements before Offsets	1,642,207,784	
Revenue Offsets	149,525,981	
Total Dollars Allocated	**$ 1,791,733,765**	

Totals may not foot due to rounding

Each of the primary allocation bases is discussed in detail in the remainder of this section. Discussion of each allocation basis includes examples of costs allocated using that particular basis.

(a) Direct assignment

Direct assignment makes use of a clear and direct connection between a revenue requirement and the function being served by that revenue requirement. Directly assigned costs typically include: Costs associated with specific treatment plants, purely administrative costs, and certain distribution and conveyance departmental costs. Examples of costs that are directly assigned to specific functional categories are given below.

* Water System Operations Group departmental costs for treatment plants are directly assigned to treatment.
* Transmission charges for SWP are directly assigned to conveyance.

(b) Net Book ValuePlus Work-In-Progress

Capital financing costs, including debt service and funding replacements and refurbishments from operating revenues, comprise about 30percent of Metropolitan's annual revenue requirements. One approach would be to allocate payments on each debt issue in direct proportion to specific project expenditures made using bond proceeds. But, this approach would result in a high degree of volatility in relative capital cost allocations from year to year. The approach used in this analysis is one widely used in water industry cost of service studies. Capital and debt-related costs (including repair and replacement costs paid from current revenues) are allocated on the basis of the relative net book values of fixed assets plus work in progress for assets under construction within each functional category. This approach produces capital cost allocations that are consistent with the functional distribution of assets. Also, since the allocation basis is tied to fixed asset records rather than debt payment records, the resulting allocations are more reflective of the true useful lives of assets. Use of net book values as an allocation basis provides an improved matching of functional costs with asset lives. A listing of fixed asset net book values summarized by asset function is shown in Schedule 3.

Schedule 3. Net Book Value and Work in Progress Allocation Base

Functional Categories	NBV for FY 2016	% of Total NBV
Source of Supply	$ 30,274,044	0.4%
Conveyance & Aqueduct	1,809,704,101	20.9%
Storage	2,140,326,295	24.7%
Treatment	2,752,343,054	31.8%
Distribution	1,455,183,855	16.8%
Administrative & General	332,149,508	3.8%
Hydroelectric	129,745,901	1.5%
Total Fixed Assets Net Book Value	**$ 8,649,726,758**	**100.0%**

Totals may not foot due to rounding

In most instances, the cost-of-service process uses net book value*plus* work-in-progress to develop allocation bases for debt and capital costs.

Examples of revenue requirements allocated using these net book valueand work-in-progress allocations are shown below.

* Revenue Bond Debt Service: *allocated using Net Book Value plus Work In Progress.*
* Annual deposit of operating revenue to replacement and refurbishment fund: *allocated using Net Book Value plus Work In Progress.*

To calculate the relative percentage of fixed assets in each functional category, Metropolitan staff conducted a detailed analysis of historical accounting records and built a database of fixed asset accounts that contains records for all facilities currently in service and under construction. Each facility was sorted into the major service function that best represented the facilities primary purpose and was then further categorized into the appropriate sub-functions described earlier.

(c) Prorating in proportion to other allocations

Utility cost of service studies frequently contain line items for which it would be difficult to identify an allocation basis specific to that line item. In these cases, the most logical allocation basis is often a prorata blend of allocation results calculated for other revenue requirements in the same departmental group, or general category. Reasonable prorata allocations are based on a logical nexus between a cost and the purpose which it serves. For example: Human Resources Section costs are allocated using all labor costs, since Human Resources spends its time and resources attending to the labor force.

(d) Manager analyses

The functional interrelationships of some organizational units are so complex and/or dynamic that reliable allocation bases can only be developed with extensive input from the organization's

managers. In these cases, managers use their firsthand knowledge of the organization's internal operations to generate a functional analysis of departmental costs. For example, Fleet Services Unit costs are allocated to treatment, storage, conveyance and distribution based on vehicle count by location.

(e) Prior year results

If available, accounting data for the prior fiscal year by appropriation are used to functionalize Departmental O&M costs for several units or sections. Many of the appropriations parallel the service functions used in the cost of service. For example, Conveyance and Distribution Section costs are allocated to distribution, hydroelectric, and conveyance functions based on the prior year accounting data by appropriation.

A summary of the functional allocation results is shown in Schedules 4 and 5. Schedule 4 provides a breakdown of the revenue requirement for FY 2015/16 into the major service functions and sub-functions prior to the redistribution of administrative and general costs. Schedule 5 serves as a cross-reference summarizing how the budget line items are distributed among the service functions. The largest functional component of Metropolitan's revenue requirement is the Conveyance and Aqueduct function, which constitutes approximately 37 percent of the allocated revenue requirement.

Schedule 4. Revenue Requirement (by service function)

Functional Categories	Fiscal Year Ending 2016	% of Allocated Dollars (1)
Source of Supply		
CRA	$ 49,575,433	3.3%
SWP	96,955,478	6.5%
Other Supply	11,549,652	0.8%
Total	**158,080,563**	**10.5%**
Conveyance & Aqueduct		
CRA		
CRA Power (net of sales)	48,857,741	3.3%
CRA All Other	52,080,163	3.5%
SWP		
SWP Power	193,118,636	12.9%
SWP All Other	182,217,774	12.1%
Other Conveyance & Aqueduct	87,325,182	5.8%
Total	**563,599,496**	**37.5%**
Storage		
Storage Costs Other Than Power		
Emergency	67,282,079	4.5%
Drought	56,490,770	3.8%
Regulatory	16,934,890	1.1%
Wadsworth plant pumping/generation	(1,520,282)	0.1%
Total	**139,187,457**	**9.5%**
Treatment		
Jensen	60,100,094	4.0%
Weymouth	62,617,040	4.2%
Diemer	58,833,160	3.9%
Mills	30,538,485	2.0%
Skinner	65,594,211	4.4%
Total	**277,682,991**	**18.5%**
Distribution	155,425,021	10.3%
Demand Management	71,686,825	4.8%
Hydroelectric	(3,212,856)	0.2%
Administrative & General	130,232,305	8.7%
Total Functional Allocations:	**$ 1,492,681,803**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
Totals may not foot due to rounding

Schedule 5. Service Function Revenue Requirements (by budget line item)

Fiscal Year Ending 2016	Source of Supply	Conveyance & Aqueduct	Storage	Water Quality	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total $ Allocated
Departmental Operations & Maintenance										
Office of the General Manager & Human Resources	$ 1,203,318	$ 8,964,397	$ 792,987	$ -	$ 4,419,717	$ 3,027,311	$ 370,259	$ 293,646	$ 6,697,083	$ 25,768,716
External Affairs	-	-	-	-	-	-	2,897,383	-	14,291,223	17,188,606
Water System Operations	12,546,789	38,317,628	3,528,311	-	97,792,705	57,158,424	8,160	5,370,823	953,683	215,676,523
Chief Financial Officer	-	-	-	-	-	-	-	-	9,187,432	9,187,432
Business Technology & Engineering Services	2,496,064	10,644,224	8,988,988	-	18,315,713	11,055,946	735,770	1,032,911	31,714,743	84,984,360
Real Property Development & Mgmt	-	-	5,289,803	-	-	-	-	-	-	5,289,803
Water Resource Management	9,380,797	-	-	-	128,775	1,152,505	5,485,083	-	193,594	16,340,755
Ethics Department	-	-	-	-	-	-	-	-	990,943	990,943
General Counsel	-	-	-	-	-	-	-	-	12,598,621	12,598,621
Audit Department	-	-	-	-	-	-	-	-	2,925,708	2,925,708
Total Departmental O&M	25,626,969	57,926,248	18,600,089	-	120,656,910	72,394,186	9,496,655	6,697,379	79,553,028	390,951,466
General District Requirements										
State Water Project	78,539,665	436,464,698	-	-	-	-	-	-	-	515,004,362
Colorado River Aqueduct Power	-	36,503,152	-	-	-	-	-	-	-	36,503,152
Supply Programs	66,451,886	-	-	-	-	-	-	-	-	66,451,886
Demand Management	-	-	-	-	-	-	61,654,768	-	-	61,654,768
Capital Financing Program	1,754,848	104,900,282	124,064,940	-	166,961,885	100,251,448	-	7,520,777	19,253,190	524,707,370
Other Operating Costs	620,797	1,264,620	409,105	-	2,280,150	1,561,802	1,741,018	151,493	18,605,795	26,634,780
Increase (Decrease) in Required Reserves	-	-	-	-	-	-	-	-	20,300,000	20,300,000
Total General District Requirements	147,367,196	579,132,751	124,474,045	-	169,242,035	101,813,250	63,395,786	7,672,270	58,158,985	1,251,256,317
Revenue Offsets	(14,913,602)	(73,459,503)	(3,886,678)	-	(12,215,955)	(18,782,415)	(1,205,615)	(17,582,506)	(7,479,708)	(149,525,981)
Net Revenue Requirements	**$ 158,080,563**	**$ 563,599,496**	**$ 139,187,457**	**$ -**	**$ 277,682,991**	**$ 155,425,021**	**$ 71,686,825**	**$ (3,212,856)**	**$ 130,232,305**	**$ 1,492,681,803**

Totals may not foot due to rounding

1.4 Classified Costs

In the cost classification step, functionalized costs are further categorized based on the causes and behavioral characteristics of these costs. An important part of the classification process is identifying which costs are incurred to meet average demands vs. peak demands and which costs are incurred to provide standby service. As with the functional allocation process, the proposed classification process is consistent with AWWA guidelines, but has been tailored to meet Metropolitan's specific operational structure and service environment.

Two methods are discussed in the AWWA M1 Manual, Principles of Water Rates, Fees and Charges. These two methods are the Commodity/Demand method and the Base/Extra Capacity method.

In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand method allocates costs that vary with the amount of water produced to the commodity category with all other costs associated with water production allocated to the demand category. In the Base/Extra Capacity method, costs related to average demand conditions are allocated to the base category, and capacity costs associated with meeting above average demand conditions are allocated to the extra capacity category.

The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Classification categories used in the analysis include:

- Fixed demand costs
- Fixed commodity costs
- Fixed standby costs
- Variable commodity costs
- Hydroelectric costs

Demand costs are incurred to meet peak demands. Only the direct capital financing costs were included in the demand classification category. A portion of capital financing costs was included in the demand cost category because in order to meet peak demands additional physical capacity is designed into the system and, therefore, additional capital costs are incurred. Commodity costs are generally costs that tend to vary with the amount of water produced. Variable commodity costs include costs of chemicals, most power costs, and other cost components that increase or decrease in relation to the volume of water supplied. Fixed commodity costs include fixed operations and maintenance and capital financing costs that are not related to accommodating peak demands or standby service.

Standby service costs relate to Metropolitan's role in ensuring system reliability during emergencies such as an earthquake or an outage of a major facility like the Colorado River Aqueduct. The standby costs identified include the emergency storage capacity within the system, and the standby capacity within the conveyance and distribution systems.

An additional component used in Metropolitan's cost classification process is the hydroelectric component. While not a part of most water utilities' cost classification procedures, the hydroelectric classification component is necessary to segregate revenue requirements carried from the hydroelectric function established in the functional allocation process. Hydroelectric revenue requirements are later embedded in the distribution function. Any net revenues generated by the hydroelectric operations offset the distribution costs and reduce the System Access Rate. All users of the distribution system benefit proportionately from the revenue offset provided by the sale of hydroelectric energy.

Schedule 6 provides the classification percentages used to distribute the service function costs into demand, commodity and standby service classification categories. All of the supply costs are classified as fixed commodity costs. Because these particular supply costs have been incurred to provide an amount of annual reliable system yield and not to provide peak demand delivery capability or standby service, they are reasonably treated as fixed commodity costs.

Costs for the Conveyance and Aqueduct (C&A) service function are classified into demand, commodity, and standby categories. Because the capital costs for C&A were incurred to meet all three classification categories, an analysis of C&A capacity usage for the test year was used to determine that 54 percent of the available conveyance capacity varies with the quantity of water produced. A system peak factor[1] of 1.4 was applied to the annual usage to determine that 24 percent of available capacity is used to meet peak monthly deliveries to the member agencies. The remaining portion of C&A, around 22 percent, is used for standby. The same classification percentages are applied to the CRA, SWP, and Other (Inland Feeder) Conveyance and Aqueduct sub-functions. The classification shares reflect the system average use of conveyance capacity and not the usage of individual facilities. All of the Conveyance and Aqueduct energy costs for pumping water to Southern California are classified as variable commodity costs and, therefore, are not shown in Schedule 6 because they carry through the classification step.

Storage service function costs for emergency, drought and regulatory storage are also distributed to the classification categories based on the type of service provided. Emergency storage costs are classified as 100 percent standby related. Emergency storage is a prime example of a cost Metropolitan incurs to ensure the reliability of deliveries to the member agencies. In effect, through the emergency storage capacity in the system, Metropolitan is "standing by" to provide service in the event of a catastrophe such as a major earthquake that disrupts regional conveyance capacity for an extended period of time. Drought carryover storage serves to provide reliable supplies by carrying over surplus supplies from periods of above normal precipitation and snow pack to drought periods when supplies decrease. Drought storage creates supply and is one component of the portfolio of resources that result in a reliable amount of annual system supplies. As a result, drought storage is classified as a fixed commodity cost, in the same manner as Metropolitan's supply costs. Regulatory storage within the Metropolitan system provides operational flexibility in meeting peak demands and flow requirements, essentially increasing the physical distribution capacity. Therefore, regulatory storage is classified in the same manner as distribution costs.

[1] Peak monthly deliveries to the member agencies average about 44 percent more than the average monthly deliveries.

Distribution service function costs were classified as fixed commodity by using projected sales data for the test year. During this period, 44 percent of the system distribution capacity varies with the quantity of water produced. Distribution service function costs were classified as fixed demand by using three years of recorded non-coincident peaks. The difference between the three-year average non-coincident peak and the commodity flows divided by the system capacity, or 39 percent of the distribution capacity, was used to meet peak day demands. Although the Metropolitan distribution system has a great deal of operational flexibility, the total amount of distribution capacity was limited to the historical peak non-coincident[2] 24-hour daily flow of all the member agencies. The remaining 17 percent of distribution capacity is associated with standby service.

Treatment service function costs were also classified as fixed commodity by using projected treated deliveries to the member agencies for the test year. Treatment fixed demand percentage calculation uses system non-coincident peak factor applied to the test year usage; the remaining capacity is associated with standby service. Total treated water capacity of 4,204 cfs, the total design capacity of all the treatment plants, was used in the calculation. Administrative and general costs have been allocated to the classification categories by service function based on the ratio of classified non-A&G service function costs to total non-A&G service function costs.

[2] The term "non-coincident" means that the peak day flow for each agency may or may not coincide with the peak day system flow. Both non-coincident and coincident approaches to measuring peak demands are used in rate design approaches. A non-coincident approach is used in the rate design to capture the different operating characteristics of the member agencies (e.g., the distribution system is designed to meet peak demands in different load areas within the System that have non-coincident demands due to each member agencies unique operating characteristics).

Schedule 6. Classification Percentages

Function	Classification Percentages: Fixed Commodity	Fixed Demand	Fixed Standby	Total % Classified	Comments
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs classified as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs classified as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	54%	24%	22%	100%	Demand percentage represents amount of system conveyance capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remainding conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	54%	24%	22%	100%	
Other	54%	24%	22%	100%	
Storage					
Emergency	0%	0%	100%	100%	Classifies as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Classified as fixed commodity (recovered by Supply Rates)
Regulatory	44%	39%	17%	100%	Classified the same way as distribution.
Treatment	30%	30%	40%	100%	Demand percentage represents amount of system treatment capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same classification is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution	44%	39%	17%	100%	Demand percentage represents amount of system distribution capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same classification is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.

Totals may not foot due to rounding

A summary of cost classification results is shown in Schedule 7. Theclassification of the service function costs results in about 8 percent, or $129 million of the total revenue requirements, being allocated to the demand classification category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to C&A fixed demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

Schedule 7. Service Function Revenue Requirements (by classification category)

Fiscal year ending 2016 Functional categories (by sub-Fuction)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total Classified
Source of Supply						
CRA	$ -	$ 55,791,153	$ -	$ -	$ -	$ 55,791,153
SWP	-	109,111,663	-	-	-	109,111,663
Other Supply	-	12,997,737	-	-	-	12,997,737
Subtotal: Source of Supply	-	177,900,553	-	-	-	**177,900,553**
Conveyance & Aqueduct						
CRA						
CRA Power	-	14,828,297	-	37,086,408	-	51,914,705
CRA All Other	3,401,553	51,553,290	3,193,839	-	-	58,148,682
SWP						
SWP Power	-	-	-	200,722,567	-	200,722,567
SWP All Other	11,680,500	180,832,482	10,967,237	-	-	203,480,219
Other Conveyance & Aqueduct	18,851,062	57,612,241	19,151,556	-	-	95,614,858
Subtotal: Conveyance & Aqueduct	33,933,115	304,826,310	33,312,632	237,808,975	-	**609,881,031**
Storage						
Storage Costs Other Than Power						
Emergency	-	9,907,404	61,453,531	-	-	71,360,935
Drought	-	63,573,529	-	-	-	63,573,529
Regulatory	6,193,449	9,567,940	2,679,297	-	-	18,440,686
Storage Power	-	-	-	(1,580,142)	-	(1,580,142)
Subtotal: Storage	6,193,449	83,048,873	64,132,828	(1,580,142)	-	**151,795,008**
Water Quality						
CRA	-	-	-	-	-	-
SWP	-	-	-	-	-	-
Other	-	-	-	-	-	-
Subtotal: Water Quality	-	-	-	-	-	**-**
Treatment	49,842,505	158,318,283	62,604,898	31,266,608	-	**302,032,294**
Distribution	34,773,794	121,628,131	15,043,205	-	-	**171,445,130**
Demand Management	-	80,674,851	-	-	-	**80,674,851**
Hydroelectric	-	-	-	-	(1,047,063)	**(1,047,063)**
Total Costs Classified	**$ 124,742,863**	**$ 926,397,000**	**$ 175,093,562**	**$ 267,495,441**	**$ (1,047,063)**	**$ 1,492,681,803**

Totals may not foot due to rounding

About 62 percent of the revenue requirement ($926 million) is classified as fixed commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs classified to the Standby category total about $175 million and account for about 12 percent of the revenue requirements. Standby service costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby service. The variable commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are classified as variable commodity costs, total about $267 million, and account for about 18 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

2 Rates and Charges

Schedule 8 provides a cross-reference between the classified service function costs and their allocation to the rate design elements. The specifics of each rate design element are discussed in detail in the following section. Schedule 9 summarizes the rates and charges that would be effective on January 1, 2016 using the assumptions and methodology of this report. Average costs by member agency will vary depending upon an agency's RTS allocation, capacity charge and relative proportions of treated and untreated Tier 1 and Tier 2 purchases.

Schedule 8. Classified Service Function Revenue Requirements (by rate design element)

Fiscal year ending 2016	Rate Design Elements							
Service Function by Classification Category	Supply Rates	System Access Rate	Water Stewardship Rate	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	Total Costs Allocated
Supply								
Fixed Demand	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fixed Commodity	177,900,553	-	-	-	-	-	-	177,900,553
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	177,900,553	-	-	-	-	-	-	177,900,553
Conveyance and Aqueduct								
Fixed Demand	-	-	-	-	-	33,933,115	-	33,933,115
Fixed Commodity	-	304,826,310	-	-	-	-	-	304,826,310
Fixed Standby	-	-	-	-	-	33,312,632	-	33,312,632
Variable Commodity	-	-	-	237,808,975	-	-	-	237,808,975
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Conveyance and Aqueduct	-	304,826,310	-	237,808,975	-	67,245,747	-	609,881,031
Storage								
Fixed Demand	-	-	-	-	6,193,449	-	-	6,193,449
Fixed Commodity	63,573,529	19,475,344	-	-	-	-	-	83,048,873
Fixed Standby	-	-	-	-	-	64,132,828	-	64,132,828
Variable Commodity	(1,580,142)	-	-	-	-	-	-	(1,580,142)
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Storage	61,993,387	19,475,344	-	-	6,193,449	64,132,828	-	151,795,008
Treatment								
Fixed Demand	-	-	-	-	-	-	49,842,505	49,842,505
Fixed Commodity	-	-	-	-	-	-	158,318,283	158,318,283
Fixed Standby	-	-	-	-	-	-	62,604,898	62,604,898
Variable Commodity	-	-	-	-	-	-	31,266,608	31,266,608
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Treatment	-	-	-	-	-	-	302,032,294	302,032,294
Distribution								
Fixed Demand	-	-	-	-	34,773,794	-	-	34,773,794
Fixed Commodity	-	121,628,131	-	-	-	-	-	121,628,131
Fixed Standby	-	-	-	-	-	15,043,205	-	15,043,205
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	(1,047,063)	-	-	-	-	-	(1,047,063)
Subtotal: Distribution	-	120,581,068	-	-	34,773,794	15,043,205	-	170,398,066
Demand Management								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	80,674,851	-	-	-	-	80,674,851
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	80,674,851	-	-	-	-	80,674,851
Total								
Fixed Demand	-	-	-	-	40,967,243	33,933,115	49,842,505	124,742,863
Fixed Commodity	241,474,082	445,929,785	80,674,851	-	-	-	158,318,283	926,397,000
Fixed Standby	-	-	-	-	-	112,488,664	62,604,898	175,093,562
Variable Commodity	(1,580,142)	-	-	237,808,975	-	-	31,266,608	267,495,441
Hydroelectric	-	(1,047,063)	-	-	-	-	-	(1,047,063)
Total	**$ 239,893,940**	**$ 444,882,721**	**$ 80,674,851**	**$ 237,808,975**	**$ 40,967,243**	**$ 146,421,779**	**$ 302,032,294**	**$ 1,492,681,803**

Totals may not foot due to rounding

Schedule 9. Rates and Charges Summary

Effective January 1st	2014	2015	2016
Tier 1 Supply Rate ($/AF)	$148	$155	$154
Tier 2 Supply Rate ($/AF)	$290	$290	$290
System Access Rate ($/AF)	$243	$253	$257
Water Stewardship Rate ($/AF)	$41	$41	$41
System Power Rate ($/AF)	$161	$125	$137
Full Service Untreated Volumetric Cost ($/AF)			
Tier 1	$593	$574	$589
Tier 2	$735	$709	$725
Full Service Exchange Cost ($/AF)	$445	$419	$435
Treatment Surcharge ($/AF)	$297	$335	$339
Full Service Treated Volumetric Cost ($/AF)			
Tier 1	$890	$909	$928
Tier 2	$1,032	$1,044	$1,064
Readiness-to-Serve Charge ($M)	$166	$155	$148
Capacity Charge ($/cfs)	$8,600	$10,900	$10,500

2.1 System Access Rate (SAR)

The SAR is a volumetric[3] system-wide rate levied on each acre-foot of water that moves through the MWD system. The MWD system includes MWD's right to use SWP facilities for transportation of SWP and non-SWP water. All system users (member agency or third party) pay the SAR to use Metropolitan's conveyance and distribution system. To meet the board stated objective to collect all costs in 2015/16, the SAR would increase to $257 per acre-foot. The SAR recovers the cost of providing conveyance and distribution capacity to meet average annual demands. Current estimates indicate that the SAR revenue requirement will be about $445 million in FY 2015/16, or 30 percent of the total revenue requirement.

[3] A volumetric rate is a charge applied to the actual amount of water delivered.

2.2 Water Stewardship Rate (WSR)

The WSR would remain unchanged at $41 per acre-foot. The WSR recovers the costs of providing financial incentives for existing and future investments in local resources including conservation and recycled water. These investments or incentive payments are identified as the "demand management" service function in the cost of service process. Demand management costs are classified as 100 percent fixed commodity costs and are estimated to be about $81 million in FY 2015/16, about 5 percent of the revenue requirement. The WSR is a volumetric rate paid by each acre-foot of water that moves through the Metropolitan system. All system users (member agency or third parties) will pay the same proportional costs for existing and future conservation and recycling investments.

Investments in conservation, recycling, and groundwater recovery decrease the region's overall dependence on imported water supplies from environmentally sensitive areas like the Bay-Delta; increase the overall level of water supply reliability in Southern California; reduce and defer system capacity expansion costs; and create available space to be used to complete water transfers. Because conservation measures and local resource investments reduce the overall level of dependence on the imported water system, more capacity is available in existing facilities for a longer period of time. The space in the system made available by conservation and recycling is open to all system users. Similar to the public benefit charges implemented in the electric and natural gas industries in California after "open access" (customer choice of supplier) was implemented, the regional and statewide benefits of demand management are assessed to all users of the Metropolitan system, regardless of the source of the imported water supply.

The benefits of demand management programs are recognized by section 130.5 of the MWD Act, enacted by S.B. 60 (Stats. 1999, ch. 414), which requires the Metropolitan to "place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." Because Metropolitan is mandated under S.B. 60 to fund water supply programs like conservation and recycling, it is appropriate to recover the costs of supporting these programs on all water moved through the system.

2.3 System Power Rate (SPR)

SPR would increase to $137 per acre-foot in 2016. The SPR is a volumetric rate that recovers the costs of pumping water to Southern California. The SPR recovers the cost of power for both the SWP and CRA. In FY 2015/16 the revenue requirement for the SPR is estimated to be about $238 million, about 16 percent of the total revenue requirement.

2.4 Treatment Surcharge

The treatment surcharge would increase to $339 per acre-foot to collect all treatment costs in 2015/16. The treatment surcharge is a system-wide volumetric rate set to recover the cost of providing treated water service. The treatment surcharge revenue requirement is expected to be about $302 million in FY 2015/16, almost 20 percent of the total revenue requirement. The treatment surcharge recovers all costs associated with providing treated water service, including commodity, demand and standby related costs. Significant capital improvements at Metropolitan's five treatment plants, such as the Ozone Retrofit Program at Weymouth, as well as refurbishments and improvement programs at all five treatment plants result in additional capital financing costs being allocated to the treatment surcharge.

2.5 Capacity Charge

The Capacity Charge would decrease to $10,500 per cubic-foot-second of capacity during calendar year 2016. The decrease is due to the decrease in pay-as-you-go funding of the CIP. The capacity charge is levied on the maximum summer day demand placed on the distribution system between May 1 and September 30 for a three-calendar year period. The three-year period ending December 31, 2014 is used to levy the capacity charge effective January 1, 2016 through December 31, 2016. Demands measured for the purposes of billing the capacity charge include all firm demand, including wheeling service and exchanges.

The capacity charge is intended to pay for the cost of peaking capacity on Metropolitan's distribution system, while providing an incentive for local agencies to decrease their use of the Metropolitan system to meet peak day demands and to shift demands into lower use time periods particularly October through April. Over time, a member agency will benefit from local supply investments and operational strategies that reduce its peak day demand on the system in the form of a lower total capacity charge. The estimated capacity charge to be paid by each member agency in calendar year 2016 will be provided to the Board in April 2015.

2.6 Readiness-to-Serve Charge

The costs of providing standby service, such as emergency storage, are recovered by the RTS. Metropolitan's costs for providing emergency storage capacity within the system are estimated to be about $64 million in FY 2015/16. In addition, to simplify the rate design by reducing the number of separate charges, the demand and standby related costs identified for the conveyance and aqueduct service function, and standby costs for the distribution function, are also allocated to the RTS. These costs are estimated to be about $82million in FY 2015/16. The RTS would decrease to $148million in calendar year 2016. The decrease is due to the decrease in pay-as-you go funding of the CIP.

The RTS is allocated to the member agencies based on each agency's proportional share of a ten-year rolling average of all firm deliveries (including water transfers and exchanges that use Metropolitan system capacity). A ten-year rolling average leads to a relatively stable RTS allocation that reasonably represents an agency's potential long-term need for standby service under different demand conditions. Member agencies that so choose may have a portion of their total RTS obligation offset by standby charge collections levied by Metropolitan on behalf of the member agency. The detailed schedule with an estimate of each agency's RTS obligation for calendar year 2016 will be provided to the Board in April 2015.

2.7 Purchase Order

The Purchase Order determines the amount of water that can be purchased at the Tier 1 rate. The existing Amended and Restated Purchase Order agreements presently in effect expire December 31, 2014. The Purchase Order will be addressed in the second half of 2014.

2.8 Tier 2 supply rate

The Tier 2 Supply Rate reflects Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and conservation. The Tier 2 Supply Rate would remain at its current level of $290 per acre-foot. At an expected average sales level of 1.75 million acre-feet, it is estimated that no acre-feet will be sold at the Tier 2 Supply Rate.

2.9 Tier 1 supply rate

The total revenue requirement for the supply service function is about $240 million in FY 2015/16. The Tier 1 Supply Rate would decrease to $154 per acre-foot in 2016. The Tier 1 Supply Rate is simply calculated as the amount of the total supply revenue requirement that is not recovered by the Tier 2 Supply Rate divided by the estimated amount of Tier 1 water sales. At an expected demand level of about 1.75 MAF, it is estimated that Metropolitan will sell about 1.57MAF at the Tier 1 Supply Rate in 2015/16.The two-tier pricing approach is closely linked to the Purchase Order and a base level of demand. The 2016 Tier 1 Annual Limit for all member agencies will be provided to the Board in April 2015.

3 Sales

Staff estimates of water sales used for developing the rate recommendation were based on current member agency demands and information and an expectation that demands will trend to levels expected under normal weather conditions. Since 1989/90, total sales have averaged about 2.00 MAF per year, ranging from a high of around 2.5 MAF in 1989/90 to a low of about 1.5 MAF in 1997/98. In 2015/16, water sales are projected to be 1.75 MAF. Treated water sales are projected to be 898 TAF in 2015/16, and Exchanges 179 TAF.

4 Proof of Revenue

Based on expected sales of 1.75 MAF the expected revenues would be about $4.1 million higher than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost-of-service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements, but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2016, the expected revenues for 2015/16 will be about $8.6million lower than the total revenue requirement in 2015/16. The total revenue requirement includes a $2.6million increase in the required reserves for the Revenue Remainder Fund. Draws from the Water Stewardship Fund are $8.9 million and deposits to the Treatment Surcharge Stabilization Fund $0.3 million in 2015/16. Accounting for these adjustments, the deposit to reserves is almost $2.7 million in 2015/16.

Schedule 10. FY 2015/16 Proof of Revenue if Rates Effective for Full Test Year ($ millions)

	Revenues if Rates Effective July 1st	Revenue Requirements	Difference	% Over (Under) Collected
Supply	241.9	239.9	2.0	1%
System Access Rate	449.8	444.9	4.9	1%
Water Stewardship Rate	71.8	80.7	(8.9)	-11%
System Power Rate	239.8	237.8	1.9	1%
Treatment Surcharge	304.3	302.0	2.3	1%
Readiness-to-serve Charge	148.0	146.4	1.6	1%
Capacity Charge	41.3	41.0	0.4	1%
Total	**1,496.8**	**1,492.7**	**4.1**	**0%**

Totals may not foot due to rounding

Schedule 11. FY 2015/16 Proof of Revenue if Rates Effective January 1 ($ millions)

	Revenues if Rates Effective Jan 1	Revenue Requirements	Difference	% Over (Under) Collected
Supply	242.8	239.9	2.9	1%
System Access Rate	445.8	444.9	0.9	0%
Water Stewardship Rate	71.8	80.7	(8.9)	-11%
System Power Rate	227.8	237.8	(10.0)	-4%
Treatment Surcharge	302.3	302.0	0.3	0%
Readiness-to-serve Charge	151.5	146.4	5.1	3%
Capacity Charge	42.1	41.0	1.2	3%
Total	**1,484.1**	**1,492.7**	**(8.6)**	**-1%**

Totals may not foot due to rounding

Metropolitan Water District of Southern California

Fiscal Year 2014/15 Cost of Service Option 3

April2014

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1 Cost of Service

Prior to discussing the specific rates and charges that make up the rate structure, it is important to understand the cost of service process that supports the rates and charges. The purpose of the cost of service process is to: (1) identify which costs should be recovered through rates and charges; (2) organize Metropolitan's costs into service functions; (3) classify service function costs on the basis for which the cost was incurred; and (4) allocate costs to rate elements. The purpose of sorting Metropolitan's costs in a manner that reflects the type of service provided (e.g., supply vs. conveyance), the characteristics of the cost (e.g., fixed or variable) and the reason why the cost was incurred (e.g., to meet peak or average demand) is to create logical cost of service "building blocks". The building blocks can then be arranged to design rates and charges with a reasonable nexus between costs and benefits.

1.1 Cost of Service Process

The general cost of service process involves the four basic steps outlined below.

Step 1 - Development Of Revenue Requirements

In the revenue requirement step, the costs that Metropolitan must recover through rates and charges, after consideration of revenue offsets, are identified. The cash needs approach, an accepted industry practice for government-owned utilities, has historically been used in identifying Metropolitan's revenue requirements and was applied for the purposes of this study. Under the cash needs approach, revenue requirements include operating costs and annual requirements for meeting financed capital items (debt service, funding of replacement and refurbishment from operating revenues, etc.).

Step 2 – Identification Of Service Function Costs

In the functional allocation step, revenue requirements are allocated to different categories based on the operational functions served by each cost. The functional categories are identified in such a way as to allow the development of logical allocation bases. The functional categories used in the cost of service process include:

- Supply
- Conveyance and Aqueduct
- Storage
- Treatment
- Distribution
- Demand Management
- Administrative and General
- Hydroelectric

In order to provide more finite functional allocation, many of these functional categories are subdivided into more detailed sub-functions in the cost of service process. For example, costs for the Supply and Conveyance and Aqueduct functions are further subdivided into the sub-functions State Water Project (SWP), Colorado River Aqueduct (CRA), and Other. Similarly, costs in the Storage function are broken down into the sub-functions Emergency Storage, Drought Carryover Storage, and Regulatory Storage.

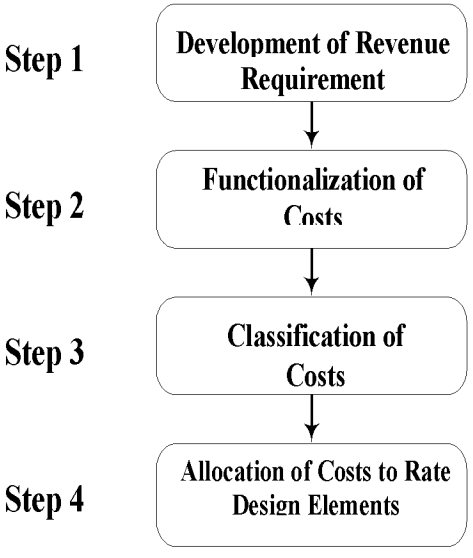
Step 3 - Classification Of Costs

In the cost classification step, functionalized costs are separated into categories according to their causes and behavioral characteristics. Proper cost classification is critical in developing a rate structure that recovers costs in a manner consistent with the causes and behaviors of those costs. Under American Water Works Association (AWWA) guidelines, cost classification may be done using either the Base/Extra-Capacity approach or the Commodity/Demand approach. In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Step 4 - Allocation Of Costs To Rate Design Elements

The allocation of costs to the rate design elements depends on the purpose for which the cost was incurred and the manner in which the member agencies use the Metropolitan system. For example, costs incurred to meet average system demands are typically recovered by dollar per acre-foot rates and are allocated based on the volume of water purchased by each agency. Rates that are levied on the amount or volume of water delivered are commonly referred to as volumetric rates as the customer's costs vary with the volume of water purchased. Costs incurred to meet peak distribution demands (referred to in this report as demand costs) are recovered through a peaking charge (the Capacity Charge) and are allocated to agencies based on their peak summer demand behavior. Costs incurred to provide standby service in the event of an emergency are referred to here as standby costs. Differentiating between costs for average usage and peak usage is just one example of how the cost of service process allows for the design of rates and charges that improves overall customer equity and efficiency. Figure 1 summarizes the cost of service process.

Figure 1. The Cost of Service Process



1.2 Revenue Requirements

The estimated revenue requirements presented in this report are for FY 2014/15. Throughout the report, FY 2014/15 is used as the "test year" to demonstrate the application of the cost of service process. Schedule 1 summarizes the FY 2014/15 revenue requirement by the major budget line items used in Metropolitan's budgeting process. Current estimates indicate Metropolitan's annual expenditures (including capital financing costs, but not construction outlays financed with bond proceeds, if any) will total approximately $1.642billion in FY 2014/15.

The rates and charges do not have to cover this entire amount. Metropolitan generates a significant amount of revenue from interest income, hydroelectric power sales and miscellaneous income. These internally generated revenues are referred to as revenue offsets and are expected to generate about $46 million in FY 2014/15. It is expected that Metropolitan will also generate about $90 million in ad valorem property tax revenues (assuming that ad valorem tax rates are maintained at 0.0035% of assessed valuation). Property tax revenues are used to pay for a portion of Metropolitan's general obligation bond debt service, and a portion of Metropolitan's obligation to pay for debt service on bonds issued to fund the State Water Project (SWP), and other SWP costs. The total revenue offsets for FY 2014/15 are estimated to be around $136 million. Therefore, the revenue required from rates and charges is the difference between the total costs and the revenue offsets, or $1.506 billion. Given an effective date of January 1, 2015, the rates and charges recommended in this report, combined with rates and charges effective through December 31, 2014 will generate a total of $1.484 billion in 2014/15.

All of Metropolitan's costs fall under the broad categories of Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific organizational groups. General District Requirements consist of requirements associated with the Colorado River

Aqueduct (CRA), SWP, the capital financing costs associated with the Capital Investment Plan (CIP), and Water Management Programs. General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code.

When considered in total, General District Requirements make up approximately 71 percent of the absolute value of the allocated costs. The largest component of the revenue requirement relates tothe capital financing program at $566 million, which makes up approximately 32 percent of Metropolitan's FY 2015/16 revenue requirements. Capital financing costs include pay-as-you-go funding of the CIP at $240 million. Metropolitan's SWP costs is the second largest component of the revenue requirement at $496 million, constituting approximately 28 percent of the revenue requirement. Metropolitan's SWP contract requires Metropolitan to pay its allocated share of the capital, minimum operations, maintenance, power and replacement costs incurred to develop and convey its water supply entitlement, irrespective of the quantity of water Metropolitan takes delivery of in any given year. Departmental O&M costs at $386 million make up 22 percent of the total revenue requirement in FY 2014/15. Water System Operations is the largest single component of the Departmental Costs and accounts for 12 percent of the revenue requirements. Water System Operations responsibilities include operating and maintaining Metropolitan's pumping, storage, treatment, and hydroelectric facilities, as well as the CRA and other conveyance and supply facilities.

Schedule 1. Revenue Requirements (by budget line item)

	Fiscal Year Ending 2015	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of the General Manager & Human Resources	$ 25,604,438	1.4%
External Affairs	17,056,198	1.0%
Water System Operations	212,855,716	12.0%
Chief Financial Officer	8,956,070	0.5%
Business Technology & Engineering Services	83,901,805	4.7%
Real Property Development & Mgmt	5,307,024	0.3%
Water Resource Management	16,328,333	0.9%
Ethics Department	992,272	0.1%
General Counsel	12,369,676	0.7%
Audit Department	2,877,181	0.2%
Total	**386,248,712**	**21.7%**
General District Requirements		
State Water Project	495,708,877	27.9%
Colorado River Aqueduct Power	29,178,396	1.6%
Supply Programs	65,524,620	3.7%
Demand Management	62,160,118	3.5%
Capital Financing Program	566,258,865	31.9%
Operating Equipment and Leases	27,462,998	1.5%
Increase (Decrease) in Required Reserves	9,500,000	0.5%
Total	**1,255,793,874**	**70.6%**
Revenue Offsets	**(135,772,334)**	**7.6%**
Net Revenue Requirements	**$ 1,506,270,251**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
Totals may not foot due to rounding

1.3 Service Function Costs

Several major service functions result in the delivery of water to Metropolitan's member agencies. These include the supply itself, the conveyance capacity and energy used to move the supply, storage of water, distribution of supplies within Metropolitan's system, and treatment of these supplies. Metropolitan's rate structure recovers the majority of the cost of providing these functions through rates and charges.

The functional categories developed for Metropolitan's cost of service process are consistent with the AWWA rate setting guidelines, a standard chart of accounts for utilities developed by the National Association of Regulatory Utility Commissioners (NARUC), and the National Council of Governmental Accounting. Because all water utilities are not identical, the rate structure reflects Metropolitan's unique physical, financial, and institutional characteristics, as permitted under the AWWA guidelines.

A key goal of functional allocation is to maximize the degree to which rates and charges reflect the costs of providing different types of service. For functional allocation to be of maximum benefit, two criteria must be kept in mind when establishing functional categories.

- The categories should correlate charges for different types of service with the costs of providing those different types of service; and
- Each function should include reasonable allocation bases by which costs may be allocated.

Each of the functions developed for the cost of service process is described below.

- *Supply.* This function includes costs for those SWP and CRA facilities and programs that relate to maintaining and developing supplies to meet the member agencies' demands. For example, Metropolitan's supply related costs include investments in the Conservation Agreement with the Imperial Irrigation District and the Palo Verde Irrigation District (PVID) Program from the Colorado River supply programs. The SWP programs include transfer programs such as Kern Delta Program, Semitropic Water Storage Program, Yuba Accord Program, and the Arvin-Edison Water Storage Program. Costs for in-basin programs within Metropolitan's service area, such as Conjunctive Use Programsare also included.
- *Conveyance and Aqueduct.* This function includes the capital, operations, maintenance, and overhead costs for SWP and CRA facilities that convey water through Metropolitan's internal distribution system. Variable power costs for the SWP and CRA are also considered to be Conveyance and Aqueduct costs but are separately reported under a "power" sub-function. Conveyance and Aqueduct facilities can be distinguished from Metropolitan's other facilities primarily by the fact that they do not typically include direct connections to the member agencies. For purposes of this study, the Inland Feeder Project functions as an extension of the SWP East Branch and is therefore considered a Conveyance and Aqueduct facility as well.
- *Storage.* Storage costs include the capital financing, operating, maintenance, and overhead costs for Diamond Valley Lake, Lake Mathews, Lake Skinner, and five smaller regulatory reservoirs within the distribution system. Metropolitan's larger storage facilities are operated to provide: (1) emergency storage in the event of an earthquake or similar system outage; (2) drought storage that produces additional supplies during times of shortage; and (3) regulatory storage to balance system demands and supplies and provide for operating

flexibility. To reasonably allocate the costs of storage capacity among member agencies, the storage service function is categorized into sub-functions of emergency, drought, and regulatory storage.

- *Treatment.* This function includes capital financing, operating, maintenance, and overhead costs for Metropolitan's five treatment plants and is considered separately from other costs so that treated water service may be priced separately.
- *Distribution.* This function includes capital financing, operating, maintenance, and overhead costs for the "in-basin" feeders, canals, pipelines, laterals, and other appurtenant works. The "in-basin" facilities are distinguished from Conveyance and Aqueduct facilities at the point of connection to the SWP, Lake Mathews, and other major turnouts along the CRA facilities.
- *Demand Management.* A separate demand management service function has been usedto clearly identify the cost of Metropolitan's investments in local resources like conservation, recycling, and desalination.
- *Administrative and General (A&G).* These costs occur in each of the Groups' departmental budgets and reflect overhead costs that cannot be directly functionalized. The cost-of-service process allocates A&G costs to the service functions based on the labor costs of non-A&G dollars allocated to each function.
- *Hydroelectric.* Hydroelectric costs include the capital financing, operating, maintenance, and overhead costs incurred to operate the 16 small hydroelectric plants located throughout the water distribution system.

1.3.1 Functional Allocation Bases

The functional allocation bases are used to allocate costs to the various service functions. The primary functional allocation bases used in the cost-of-service process are listed below.

- Direct assignment
- Net Book Value plus Work-In-Progress
- Prorating in proportion to other allocations
- Manager analysis
- Prior year results

Schedule 2 summarizes the amounts of total cost allocated using each of the above types of allocation bases.

Schedule 2. Summary of Functional Allocations by Type of Allocation Basis

Primary Functional Allocation Bases		Estimated for FY 2015	% of Allocated Dollars
Direct Assignment	$	915,017,554	51.5%
Net Book Value/Work in Progress		611,268,845	34.4%
Prorating		75,638,194	4.3%
Manager Analysis		35,097,356	2.0%
Prior-Year Results		75,268,351	4.2%
Other	$	65,524,620	3.7%
Total Dollars Allocated	**$**	**1,777,814,920**	**100.0%**
Portion of Above Allocations Relating to:			
Revenue Requirements before Offsets		1,642,042,586	
Revenue Offsets		135,772,334	
Total Dollars Allocated	**$**	**1,777,814,920**	

Totals may not foot due to rounding

Each of the primary allocation bases is discussed in detail in the remainder of this section. Discussion of each allocation basis includes examples of costs allocated using that particular basis.

(a) Direct assignment

Direct assignment makes use of a clear and direct connection between a revenue requirement and the function being served by that revenue requirement. Directly assigned costs typically include: Costs associated with specific treatment plants, purely administrative costs, and certain distribution and conveyance departmental costs. Examples of costs that are directly assigned to specific functional categories are given below.

* Water System Operations Group departmental costs for treatment plants are directly assigned to treatment.
* Transmission charges for State Water Contract are directly assigned to conveyance SWP.

(b) Net Book ValuePlus Work-In-Progress

Capital financing costs, including debt service and funding replacements and refurbishments from operating revenues, comprise about 32percent of Metropolitan's annual revenue requirements. One approach would be to allocate payments on each debt issue in direct proportion to specific project expenditures made using bond proceeds. But, this approach would result in a high degree of volatility in relative capital cost allocations from year to year.
The approach used in this analysis is one widely used in water industry cost of service studies. Capital and debt-related costs (including repair and replacement costs paid from current revenues) are allocated on the basis of the relative net book values of fixed assets plus work in progress for assets under construction within each functional category. This approach produces capital cost allocations that are consistent with the functional distribution of assets. Also, since the allocation basis is tied to fixed asset records rather than debt payment records, the resulting allocations are more reflective of the true useful lives of assets. Use of net book values as an allocation basis provides an improved matching of functional costs with asset lives. A listing of fixed asset net book values summarized by asset function is shown in Schedule 3.

Schedule 3. Net Book Value and Work in Progress Allocation Base

Functional Categories	NBV for FY 2015	% of Total NBV
Source of Supply	$ 30,700,042	0.4%
Conveyance & Aqueduct	1,821,106,630	21.4%
Storage	2,163,558,220	25.4%
Treatment	2,640,203,625	31.0%
Distribution	1,415,131,452	16.6%
Administrative & General	324,056,000	3.8%
Hydroelectric	133,033,516	1.6%
Total Fixed Assets Net Book Value	**$ 8,527,789,487**	**100.0%**

Totals may not foot due to rounding

In most instances, the cost-of-service process uses net book value*plus* work-in-progress to develop allocation bases for debt and capital costs. Examples of revenue requirements allocated using these net book valueand work-in-progress allocations are shown below.

* Revenue Bond Debt Service: *allocated using Net Book Value plus Work In Progress.*
* Annual deposit of operating revenue to replacement and refurbishment fund: *allocated using Net Book Value plus Work In Progress.*

To calculate the relative percentage of fixed assets in each functional category, Metropolitan staff conducted a detailed analysis of historical accounting records and built a database of fixed asset accounts that contains records for all facilities currently in service and under construction. Each facility was sorted into the major service function that best represented the facilities primary purpose and was then further categorized into the appropriate sub-functions described earlier.

(c) Prorating in proportion to other allocations

Utility cost of service studies frequently contain line items for which it would be difficult to identify an allocation basis specific to that line item. In these cases, the most logical allocation basis is often a prorata blend of allocation results calculated for other revenue requirements in the same departmental group, or general category. Reasonable prorata allocations are based on a logical nexus between a cost and the purpose which it serves. For example: Human Resources Section costs are allocated using all labor costs, since Human Resources spends its time and resources attending to the labor force.

(d) Manager analyses

The functional interrelationships of some organizational units are so complex and/or dynamic that reliable allocation bases can only be developed with extensive input from the organization's managers. In these cases, managers use their firsthand knowledge of the organization's internal operations to generate a functional analysis of departmental costs. For example, Fleet Services Unit costs are allocated to treatment, storage, conveyance and distribution based on vehicle count by location.

(e) Prior year results

If available, accounting data for the prior fiscal year by appropriation are used to functionalize Departmental O&M costs for several units or sections. Many of the appropriations parallel the service functions used in the cost of service. For example, Conveyance and Distribution Section costs are allocated to distribution, hydroelectric, and conveyance functions based on the prior year accounting data by appropriation.

A summary of the functional allocation results is shown in Schedules 4 and 5. Schedule 4 provides a breakdown of the revenue requirement for FY 2014/15 into the major service functions and sub-functions prior to the redistribution of administrative and general costs. Schedule 5 serves as a cross-reference summarizing how the budget line items are distributed among the service functions. The largest functional component of Metropolitan's revenue requirement is the Conveyance and Aqueduct function, which constitutes approximately 36 percent of the allocated revenue requirement.

Schedule 4. Revenue Requirement (by service function)

Functional Categories	Fiscal Year Ending 2015	% of Allocated Dollars (1)
Source of Supply		
CRA	$ 47,179,666	3.1%
SWP	101,113,620	6.7%
Other Supply	11,745,034	0.8%
Total	**160,038,320**	**10.6%**
Conveyance & Aqueduct		
CRA		
CRA Power (net of sales)	42,693,544	2.8%
CRA All Other	52,957,580	3.5%
SWP		
SWP Power	184,405,505	12.2%
SWP All Other	175,793,803	11.6%
Other Conveyance & Aqueduct	97,165,413	6.4%
Total	**553,015,844**	**36.5%**
Storage		
Storage Costs Other Than Power		
Emergency	74,268,554	4.9%
Drought	62,494,118	4.1%
Regulatory	18,566,117	1.2%
Wadsworth plant pumping/generation	(1,425,574)	0.1%
Total	**153,903,215**	**10.3%**
Treatment		
Jensen	61,764,040	4.1%
Weymouth	61,245,447	4.0%
Diemer	61,122,789	4.0%
Mills	32,076,406	2.1%
Skinner	69,485,654	4.6%
Total	**285,694,336**	**18.9%**
Distribution	161,517,186	10.7%
Demand Management	72,652,686	4.8%
Hydroelectric	(2,734,423)	0.2%
Administrative & General	122,183,088	8.1%
Total Functional Allocations:	**$ 1,506,270,251**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
Totals may not foot due to rounding

Schedule 5. Service Function Revenue Requirements (by budget line item)

Fiscal Year Ending 2015	Source of Supply	Conveyance & Aqueduct	Storage	Water Quality	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total $ Allocated
Departmental Operations & Maintenance										
Office of the General Manager & Human Resources	$ 1,207,446	$ 8,890,537	$ 804,377	$ -	$ 4,405,392	$ 3,016,462	$ 371,837	$ 293,525	$ 6,614,861	$ 25,604,438
External Affairs	-	-	-	-	-	-	2,899,604	-	14,156,594	17,056,198
Water System Operations	12,395,861	37,908,946	3,483,044	-	96,038,409	56,738,335	8,181	5,343,427	939,514	212,855,716
Chief Financial Officer	-	-	-	-	-	-	-	-	8,956,070	8,956,070
Business Technology & Engineering Services	2,452,792	10,624,123	9,094,017	-	17,749,543	10,786,617	722,436	1,033,366	31,438,910	83,901,805
Real Property Development & Mgmt	-	-	5,307,024	-	-	-	-	-	-	5,307,024
Water Resource Management	9,374,492	-	-	-	128,794	1,152,536	5,479,140	-	193,370	16,328,333
Ethics Department	-	-	-	-	-	-	-	-	992,272	992,272
General Counsel	-	-	-	-	-	-	-	-	12,369,676	12,369,676
Audit Department	-	-	-	-	-	-	-	-	2,877,181	2,877,181
Total Departmental O&M	25,430,591	57,423,606	18,688,462	-	118,322,138	71,693,950	9,481,199	6,670,318	78,538,449	386,248,712
General District Requirements										
State Water Project	78,539,665	417,169,212	-	-	-	-	-	-	-	495,708,877
Colorado River Aqueduct Power	-	29,178,396	-	-	-	-	-	-	-	29,178,396
Supply Programs	65,524,620	-	-	-	-	-	-	-	-	65,524,620
Demand Management	-	-	-	-	-	-	62,160,118	-	-	62,160,118
Capital Financing Program	1,955,149	115,978,156	137,787,370	-	175,313,745	106,114,454	-	8,472,311	20,637,681	566,258,865
Other Operating Costs	581,869	1,181,728	387,630	-	2,122,962	1,453,636	1,729,189	141,450	19,864,534	27,462,998
Increase (Decrease) in Required Reserves	-	-	-	-	-	-	-	-	9,500,000	9,500,000
Total General District Requirements	146,601,303	563,507,492	138,175,000	-	177,436,707	107,568,090	63,889,306	8,613,761	50,002,215	1,255,793,874
Revenue Offsets	(11,993,574)	(67,915,254)	(2,960,246)	-	(10,064,509)	(17,744,854)	(717,820)	(18,018,502)	(6,357,576)	(135,772,334)
Net Revenue Requirements	**$ 160,038,320**	**$ 553,015,844**	**$ 153,903,215**	**$ -**	**$ 285,694,336**	**$ 161,517,186**	**$ 72,652,686**	**$ (2,734,423)**	**$ 122,183,088**	**$ 1,506,270,251**

Totals may not foot due to rounding

1.4 Classified Costs

In the cost classification step, functionalized costs are further categorized based on the causes and behavioral characteristics of these costs. An important part of the classification process is identifying which costs are incurred to meet average demands vs. peak demands and which costs are incurred to provide standby service. As with the functional allocation process, the proposed classification process is consistent with AWWA guidelines, but has been tailored to meet Metropolitan's specific operational structure and service environment.

Two methods are discussed in the AWWA M1 Manual, Principles of Water Rates, Fees and Charges. These two methods are the Commodity/Demand method and the Base/Extra Capacity method.

In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand method allocates costs that vary with the amount of water produced to the commodity category with all other costs associated with water production allocated to the demand category. In the Base/Extra Capacity method, costs related to average demand conditions are allocated to the base category, and capacity costs associated with meeting above average demand conditions are allocated to the extra capacity category.

The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Classification categories used in the analysis include:

- Fixed demand costs
- Fixed commodity costs
- Fixed standby costs
- Variable commodity costs
- Hydroelectric costs

Demand costs are incurred to meet peak demands. Only the direct capital financing costs were included in the demand classification category. A portion of capital financing costs was included in the demand cost category because in order to meet peak demands additional physical capacity is designed into the system and, therefore, additional capital costs are incurred. Commodity costs are generally costs that tend to vary with the amount of water produced. Variable commodity costs include costs of chemicals, most power costs, and other cost components that increase or decrease in relation to the volume of water supplied. Fixed commodity costs include fixed operations and maintenance and capital financing costs that are not related to accommodating peak demands or standby service.

Standby service costs relate to Metropolitan's role in ensuring system reliability during emergencies such as an earthquake or an outage of a major facility like the Colorado River Aqueduct. The standby costs identified include the emergency storage capacity within the system, and the standby capacity within the conveyance and distribution systems.

An additional component used in Metropolitan's cost classification process is the hydroelectric component. While not a part of most water utilities' cost classification procedures, the hydroelectric classification component is necessary to segregate revenue requirements carried from the hydroelectric function established in the functional allocation process. Hydroelectric revenue requirements are later embedded in the distribution function. Any net revenues generated by the hydroelectric operations offset the distribution costs and reduce the System Access Rate. All users of the distribution system benefit proportionately from the revenue offset provided by the sale of hydroelectric energy.

Schedule 6 provides the classification percentages used to distribute the service function costs into demand, commodity and standby service classification categories. All of the supply costs are classified as fixed commodity costs. Because these particular supply costs have been incurred to provide an amount of annual reliable system yield and not to provide peak demand delivery capability or standby service, they are reasonably treated as fixed commodity costs.

Costs for the Conveyance and Aqueduct (C&A) service function are classified into demand, commodity, and standby categories. Because the capital costs for C&A were incurred to meet all three classification categories, an analysis of C&A capacity usage for the test year was used to determine that 54 percent of the available conveyance capacity varies with the quantity of water produced. A system peak factor[1] of 1.4 was applied to the annual usage to determine that 24 percent of available capacity is used to meet peak monthly deliveries to the member agencies. The remaining portion of C&A, around 22 percent, is used for standby. The same classification percentages are applied to the CRA, SWP, and Other (Inland Feeder) Conveyance and Aqueduct sub-functions. The classification shares reflect the system average use of conveyance capacity and not the usage of individual facilities. All of the Conveyance and Aqueduct energy costs for pumping water to Southern California are classified as variable commodity costs and, therefore, are not shown in Schedule 6 because they carry through the classification step.

Storage service function costs for emergency, drought and regulatory storage are also distributed to the classification categories based on the type of service provided. Emergency storage costs are classified as 100 percent standby related. Emergency storage is a prime example of a cost Metropolitan incurs to ensure the reliability of deliveries to the member agencies. In effect, through the emergency storage capacity in the system, Metropolitan is "standing by" to provide service in the event of a catastrophe such as a major earthquake that disrupts regional conveyance capacity for an extended period of time. Drought carryover storage serves to provide reliable supplies by carrying over surplus supplies from periods of above normal precipitation and snow pack to drought periods when supplies decrease. Drought storage creates supply and is one component of the portfolio of resources that result in a reliable amount of annual system supplies. As a result, drought storage is classified as a fixed commodity cost, in the same manner as Metropolitan's supply costs. Regulatory storage within the Metropolitan system provides operational flexibility in meeting peak demands and flow requirements, essentially increasing the physical distribution capacity. Therefore, regulatory storage is classified in the same manner as distribution costs.

[1] Peak monthly deliveries to the member agencies average about 44 percent more than the average monthly deliveries.

Distribution service function costs were classified as fixed commodity by using projected sales data for the test year. During this period, 44 percent of the system distribution capacity varies with the quantity of water produced. Distribution service function costs were classified as fixed demand by using three years of recorded non-coincident peaks. The difference between the three-year average non-coincident peak and the fixed commodity flows divided by the system capacity, or 39 percent of the distribution capacity, was used to meet peak day demands. Although the Metropolitan distribution system has a great deal of operational flexibility, the total amount of distribution capacity was limited to the historicalpeak non-coincident[2] 24-hour daily flow of all the member agencies. The remaining17 percent of distribution capacity is associated with standby service.

Treatment service function costs were also classified as fixed commodity by using projected treated deliveries to the member agencies for the test year. Treatment fixed demand percentage calculation uses system non-coincident peak factor applied to the test year usage; the remaining capacity is associated with standby service. Total treated water capacity of 4,204 cfs, the total design capacity of all the treatment plants, was used in the calculation. Administrative and general costs have been allocated to the classification categories by service function based on the ratio of classified non-A&G service function costs to total non-A&G service function costs.

[2] The term "non-coincident" means that the peak day flow for each agency may or may not coincide with the peak day system flow. Both non-coincident and coincident approaches to measuring peak demands are used in rate design approaches. A non-coincident approach is used in the rate design to capture the different operating characteristics of the member agencies (e.g., the distribution system is designed to meet peak demands in different load areas within the System that have non-coincident demands due to each member agencies unique operating characteristics).

Schedule 6. Classification Percentages

Function	Classification Percentages: Fixed Commodity	Fixed Demand	Fixed Standby	Total % Classified	Comments
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs classified as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs classified as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	54%	24%	22%	100%	Demand percentage represents amount of system conveyance capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remainding conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	54%	24%	22%	100%	
Other	54%	24%	22%	100%	
Storage					
Emergency	0%	0%	100%	100%	Classifies as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Classified as fixed commodity (recovered by Supply Rates)
Regulatory	44%	39%	17%	100%	Classified the same way as distribution.
Treatment	30%	30%	40%	100%	Demand percentage represents amount of system treatment capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same classification is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution	44%	39%	17%	100%	Demand percentage represents amount of system distribution capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same classification is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.

Totals may not foot due to rounding

A summary of cost classification results is shown in Schedule 7. Theclassification of the service function costs results in about 9 percent, or $133 million of the total revenue requirements, being allocated to the demand classification category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to C&A fixed demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

Schedule 7. Service Function Revenue Requirements (by classification category)

Fiscal year ending 2015 Functional categories (by sub-Fuction)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total Classified
Source of Supply						
CRA	$ -	$ 52,737,261	$ -	$ -	$ -	$ 52,737,261
SWP	-	113,024,439	-	-	-	113,024,439
Other Supply	-	13,128,557	-	-	-	13,128,557
Subtotal: Source of Supply	-	178,890,257	-	-	-	**178,890,257**
Conveyance & Aqueduct						
CRA						
CRA Power	-	15,578,691	-	29,709,599	-	45,288,290
CRA All Other	3,718,516	51,468,411	3,492,844	-	-	58,679,771
SWP						
SWP Power	-	-	-	190,516,888	-	190,516,888
SWP All Other	10,612,511	174,448,012	9,968,449	-	-	195,028,972
Other Conveyance & Aqueduct	21,514,895	62,892,107	21,150,452	-	-	105,557,455
Subtotal: Conveyance & Aqueduct	35,845,923	304,387,221	34,611,745	220,226,487	-	**595,071,376**
Storage						
Storage Costs Other Than Power						
Emergency	-	9,889,792	68,196,663	-	-	78,086,455
Drought	-	69,855,700	-	-	-	69,855,700
Regulatory	6,769,107	10,363,084	2,929,499	-	-	20,061,689
Storage Power	-	-	-	(1,472,819)	-	(1,472,819)
Subtotal: Storage	6,769,107	90,108,576	71,126,162	(1,472,819)	-	**166,531,024**
Water Quality						
CRA	-	-	-	-	-	-
SWP	-	-	-	-	-	-
Other	-	-	-	-	-	-
Subtotal: Water Quality	-	-	-	-	-	**-**
Treatment	53,281,023	159,750,225	65,304,314	30,053,063	-	**308,388,625**
Distribution	36,840,397	123,996,169	15,943,594	-	-	**176,780,161**
Demand Management	-	81,210,910	-	-	-	**81,210,910**
Hydroelectric	-	-	-	-	(602,101)	**(602,101)**
Total Costs Classified	**$ 132,736,450**	**$ 938,343,357**	**$ 186,985,815**	**$ 248,806,731**	**$ (602,101)**	**$ 1,506,270,251**

Totals may not foot due to rounding

About 62 percent of the revenue requirement ($938 million) is classified as fixed commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs classified to the Standby category total about $187 million and account for about 12 percent of the revenue requirements. Standby service costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby service. The variable commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are classified as variable commodity costs, total about $249 million, and account for about 16 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

2 Rates and Charges

Schedule 8 provides a cross-reference between the classified service function costs and their allocation to the rate design elements. The specifics of each rate design element are discussed in detail in the following section. Schedule 9 summarizes the rates and charges that would be effective on January 1, 2015 using the assumptions and methodology of this report. Average costs by member agency will vary depending upon an agency's RTS allocation, capacity charge and relative proportions of treated and untreated Tier 1 and Tier 2 purchases.

Schedule 8. Classified Service Function Revenue Requirements (by rate design element)

Fiscal year ending 2015	Rate Design Elements							
Service Function by Classification Category	Supply Rates	System Access Rate	Water Stewardship Rate	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	Total Costs Allocated
Supply								
Fixed Demand	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fixed Commodity	178,890,257	-	-	-	-	-	-	178,890,257
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	178,890,257	-	-	-	-	-	-	178,890,257
Conveyance and Aqueduct								
Fixed Demand	-	-	-	-	-	35,845,923	-	35,845,923
Fixed Commodity	-	304,387,221	-	-	-	-	-	304,387,221
Fixed Standby	-	-	-	-	-	34,611,745	-	34,611,745
Variable Commodity	-	-	-	220,226,487	-	-	-	220,226,487
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Conveyance and Aqueduct	-	304,387,221	-	220,226,487	-	70,457,668	-	595,071,376
Storage								
Fixed Demand	-	-	-	-	6,769,107	-	-	6,769,107
Fixed Commodity	69,855,700	20,252,875	-	-	-	-	-	90,108,576
Fixed Standby	-	-	-	-	-	71,126,162	-	71,126,162
Variable Commodity	(1,472,819)	-	-	-	-	-	-	(1,472,819)
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Storage	68,382,881	20,252,875	-	-	6,769,107	71,126,162	-	166,531,024
Treatment								
Fixed Demand	-	-	-	-	-	-	53,281,023	53,281,023
Fixed Commodity	-	-	-	-	-	-	159,750,225	159,750,225
Fixed Standby	-	-	-	-	-	-	65,304,314	65,304,314
Variable Commodity	-	-	-	-	-	-	30,053,063	30,053,063
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Treatment	-	-	-	-	-	-	308,388,625	308,388,625
Distribution								
Fixed Demand	-	-	-	-	36,840,397	-	-	36,840,397
Fixed Commodity	-	123,996,169	-	-	-	-	-	123,996,169
Fixed Standby	-	-	-	-	-	15,943,594	-	15,943,594
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	(602,101)	-	-	-	-	-	(602,101)
Subtotal: Distribution	-	123,394,068	-	-	36,840,397	15,943,594	-	176,178,060
Demand Management								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	81,210,910	-	-	-	-	81,210,910
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	81,210,910	-	-	-	-	81,210,910
Total								
Fixed Demand	-	-	-	-	43,609,504	35,845,923	53,281,023	132,736,450
Fixed Commodity	248,745,957	448,636,265	81,210,910	-	-	-	159,750,225	938,343,357
Fixed Standby	-	-	-	-	-	121,681,501	65,304,314	186,985,815
Variable Commodity	(1,472,819)	-	-	220,226,487	-	-	30,053,063	248,806,731
Hydroelectric	-	(602,101)	-	-	-	-	-	(602,101)
Total	**$ 247,273,137**	**$ 448,034,164**	**$ 81,210,910**	**$ 220,226,487**	**$ 43,609,504**	**$ 157,527,424**	**$ 308,388,625**	**$ 1,506,270,251**

Totals may not foot due to rounding

Schedule 9. Rates and Charges Summary

Effective January 1st	2014	2015	2016
Tier 1 Supply Rate ($/AF)	$148	$157	$154
Tier 2 Supply Rate ($/AF)	$290	$290	$290
System Access Rate ($/AF)	$243	$255	$258
Water Stewardship Rate ($/AF)	$41	$41	$41
System Power Rate ($/AF)	$161	$125	$137
Full Service Untreated Volumetric Cost ($/AF)			
Tier 1	$593	$578	$590
Tier 2	$735	$711	$726
Full Service Exchange Cost ($/AF)	$445	$421	$436
Treatment Surcharge ($/AF)	$297	$337	$343
Full Service Treated Volumetric Cost ($/AF)			
Tier 1	$890	$915	$933
Tier 2	$1,032	$1,048	$1,069
Readiness-to-Serve Charge ($M)	$166	$157	$150
Capacity Charge ($/cfs)	$8,600	$11,000	$10,700

2.1 System Access Rate (SAR)

The SAR is a volumetric[3] system-wide rate levied on each acre-foot of water that moves through the MWD system. The MWD system includes MWD's right to use SWP facilities for transportation of SWP and non-SWP water. All system users (member agency or third party) pay the SAR to use Metropolitan's conveyance and distribution system. To meet the board stated objective to collect all costs in 2014/15, the SAR would increase to $255 per acre-foot. The SAR recovers the cost of providing conveyance and distribution capacity to meet average annual demands. Current estimates indicate that the SAR revenue requirement will be about $448 million in FY 2014/15, or 30 percent of the total revenue requirement.

2.2 Water Stewardship Rate (WSR)

The WSR would remain unchanged at $41 per acre-foot. The WSR recovers the costs of providing financial incentives for existing and future investments in local resources including conservation and recycled water. These investments or incentive payments are identified as the "demand management" service function in the cost of service process. Demand management costs are classified as 100 percent fixed commodity costs and are estimated to be about $81 million in FY 2014/15, about 5 percent of the revenue requirement. The WSR is a volumetric rate paid by each acre-foot of water that moves through the Metropolitan system. All system users (member agency or third parties) will pay the same proportional costs for existing and future conservation and recycling investments.

[3] A volumetric rate is a charge applied to the actual amount of water delivered.

Investments in conservation, recycling, and groundwater recovery decrease the region's overall dependence on imported water supplies from environmentally sensitive areas like the Bay-Delta; increase the overall level of water supply reliability in Southern California; reduce and defer system capacity expansion costs; and create available space to be used to complete water transfers. Because conservation measures and local resource investments reduce the overall level of dependence on the imported water system, more capacity is available in existing facilities for a longer period of time. The space in the system made available by conservation and recycling is open to all system users. Similar to the public benefit charges implemented in the electric and natural gas industries in California after "open access" (customer choice of supplier) was implemented, the regional and statewide benefits of demand management are assessed to all users of the Metropolitan system, regardless of the source of the imported water supply.

The benefits of demand management programs are recognized by section 130.5 of the MWD Act, enacted by S.B. 60 (Stats. 1999, ch. 414), which requires the Metropolitan to "place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." Because Metropolitan is mandated under S.B. 60 to fund water supply programs like conservation and recycling, it is appropriate to recover the costs of supporting these programs on all water moved through the system.

2.3 System Power Rate (SPR)

SPR would decrease to $125 per acre-foot in 2015. The SPR is a volumetric rate that recovers the costs of pumping water to Southern California. The SPR recovers the cost of power for both the SWP and CRA. In FY 2014/15 the revenue requirement for the SPR is estimated to be about $220 million, about 15 percent of the total revenue requirement.

2.4 Treatment Surcharge

The treatment surcharge would increase to $337 per acre-foot to collect all treatment costs in 2014/15. The treatment surcharge is a system-wide volumetric rate set to recover the cost of providing treated water service. The treatment surcharge revenue requirement is expected to be about $308 million in FY 2014/15, almost 21 percent of the total revenue requirement. The treatment surcharge recovers all costs associated with providing treated water service, including commodity, demand and standby related costs. Significant capital improvements at Metropolitan's five treatment plants, such as the Ozone Retrofit Program at Weymouth, as well as refurbishments and improvement programs at all five treatment plants result in additional capital financing costs being allocated to the treatment surcharge.

2.5 Capacity Charge

The Capacity Charge would increase to $11,000 per cubic-foot-second of capacity during calendar year 2015. The increase is due to the increase in pay-as-you-go funding of the CIP, and the increase in the fixed demand classification factor. The capacity charge is levied on the maximum summer day demand placed on the distribution system between May 1 and September 30 for a three-calendar year period. The three-year period ending December 31, 2013 is used to levy the capacity charge effective January 1, 2015 through December 31, 2015. Demands measured for the purposes of billing the capacity charge include all firm demand including wheeling service and exchanges.

The capacity charge is intended to pay for the cost of peaking capacity on Metropolitan's distribution system, while providing an incentive for local agencies to decrease their use of the Metropolitan system to meet peak day demands and to shift demands into lower use time periods particularly October through April. Over time, a member agency will benefit from local supply investments and operational strategies that reduce its peak day demand on the system in the form of a lower total capacity charge. The estimated capacity charge to be paid by each member agency in calendar year 2015is included in Schedule 10.

Schedule 10. Capacity Charge (by member agency)

	Peak Day Demand (cfs) (May 1 through September 30)				Rate ($/cfs): $11,000
	Calendar Year				
AGENCY	2011	2012	2013	3-Year Peak	Calendar Year 2015 Capacity Charge
Anaheim	39.3	38.3	31.3	39.3	$432,300
Beverly Hills	31.5	32.7	30.8	32.7	$359,700
Burbank	21.4	20.9	19.7	21.4	$235,400
Calleguas	210.1	224.0	228.7	228.7	$2,515,700
Central Basin	79.2	74.5	73.6	79.2	$871,200
Compton	2.4	2.3	2.9	2.9	$31,900
Eastern	190.9	237.2	267.4	267.4	$2,941,400
Foothill	19.0	17.6	18.9	19.0	$209,000
Fullerton	27.4	24.4	20.0	27.4	$301,400
Glendale	49.0	41.5	44.9	49.0	$539,000
Inland Empire	138.0	126.7	153.9	153.9	$1,692,900
Las Virgenes	43.4	41.9	43.2	43.4	$477,400
Long Beach	59.9	60.4	66.9	66.9	$735,900
Los Angeles	329.0	512.9	767.1	767.1	$8,438,100
MWDOC	390.1	401.1	381.9	401.1	$4,412,100
Pasadena	50.6	52.1	52.5	52.5	$577,500
San Diego CWA	760.7	961.5	967.4	967.4	$10,641,400
San Fernando	1.6	2.8	4.9	4.9	$53,900
San Marino	1.3	5.3	6.1	6.1	$67,100
Santa Ana	20.0	19.2	19.6	20.0	$220,000
Santa Monica	21.1	19.7	22.7	22.7	$249,700
Three Valleys	122.7	133.0	178.6	178.6	$1,964,600
Torrance	35.5	36.2	34.1	36.2	$398,200
Upper San Gabriel	20.4	15.2	16.1	20.4	$224,400
West Basin	214.6	222.6	230.2	230.2	$2,532,200
Western MWD	179.3	193.7	198.6	198.6	$2,184,600
Total	**3,058.4**	**3,517.8**	**3,882.0**	**3,937.0**	**$43,307,000**

Totals may not foot due to rounding

2.6 Readiness-to-Serve Charge

The costs of providing standby service, such as emergency storage, are recovered by the RTS. Metropolitan's costs for providing emergency storage capacity within the system are estimated to be about $71 million in FY 2014/15. In addition, to simplify the rate design by reducing the number of

separate charges, the demand and standby related costs identified for the conveyance and aqueduct service function, and standby costs for the distribution function, are also allocated to the RTS. These costs are estimated to be about $86million in FY 2014/15. The RTS would decrease to $157million in calendar year 2015. The decrease is due to the decrease in the standby classification factor which outweighs the increase in pay-as-you go funding of the CIP.

The RTS is allocated to the member agencies based on each agency's proportional share of a ten-year rolling average of all firm deliveries (including water transfers and exchanges that use Metropolitan system capacity). A ten-year rolling average leads to a relatively stable RTS allocation that reasonably represents an agency's potential long-term need for standby service under different demand conditions. Member agencies that so choose may have a portion of their total RTS obligation offset by standby charge collections levied by Metropolitan on behalf of the member agency. The estimatedRTS for each member agency for calendar year 2015is shown in Schedule 11.

Schedule 11. Readiness-to-Serve Charge (by member agency)

			Water rate $90.56/acre-foot
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2003/04 - FY2012/13	RTS Share	12 months @ $157 million per year (1/15-12/15)
Anaheim	22,572	1.30%	$ 2,044,062
Beverly Hills	11,524	0.66%	1,043,598
Burbank	12,642	0.73%	1,144,834
Calleguas MWD	109,981	6.34%	9,959,815
Central Basin MWD	56,302	3.25%	5,098,667
Compton	2,538	0.15%	229,867
Eastern MWD	97,935	5.65%	8,868,964
Foothill MWD	10,373	0.60%	939,364
Fullerton	10,147	0.59%	918,879
Glendale	20,503	1.18%	1,856,740
Inland Empire Utilities Agency	60,010	3.46%	5,434,425
Las Virgenes MWD	22,797	1.31%	2,064,456
Long Beach	34,315	1.98%	3,107,528
Los Angeles	289,350	16.69%	26,203,404
Municipal Water District of Orange County	222,281	12.82%	20,129,611
Pasadena	21,669	1.25%	1,962,296
San Diego County Water Authority	393,731	22.71%	35,656,077
San Fernando	138	0.01%	12,479
San Marino	1,002	0.06%	90,722
Santa Ana	13,509	0.78%	1,223,358
Santa Monica	11,001	0.63%	996,208
Three Valleys MWD	68,167	3.93%	6,173,155
Torrance	18,845	1.09%	1,706,583
Upper San Gabriel Valley MWD	17,081	0.99%	1,546,864
West Basin MWD	131,114	7.56%	11,873,644
Western MWD	74,144	4.28%	6,714,401
MWD Total	1,733,668	100.00%	$ 157,000,000

Totals may not foot due to rounding

2.7 Purchase Order

The Purchase Order determines the amount of water that can be purchased at the Tier 1rate. The existing Amended and Restated Purchase Order agreements presently in effect expire December 31, 2014. The Purchase Order will be addressed in the second half of 2014.

2.8 Tier 2 supply rate

The Tier 2 Supply Rate reflects Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and conservation. The Tier 2 Supply Rate would remain at its current level of $290 per acre-foot. At an expected average sales level of 1.75 million acre-feet, it is estimated that no acre-feet will be sold at the Tier 2 Supply Rate.

2.9 Tier 1 supply rate

The total revenue requirement for the supply service function is about $247 million in FY 2014/15. The Tier 1 Supply Rate would be increased to $157 per acre-foot in 2015. The Tier 1 Supply Rate is simply calculated as the amount of the total supply revenue requirement that is not recovered by the Tier 2 Supply Rate divided by the estimated amount of Tier 1 water sales. At an expected demand level of about 1.75 MAF, it is estimated that Metropolitan will sell 1.57MAF at the Tier 1 Supply Rate in 2014/15.
The two-tier pricing approach is closely linked to the Purchase Order and a base level of demand. The 2015 Tier 1 Annual Limit for all member agencies will be provided to the Board later in 2014.

3 Sales

Staff estimates of water sales used for developing the rate recommendation were based on current member agency demands and information and an expectation that demands will trend to levels expected under normal weather conditions. Since 1989/90, total sales have averaged about 2.00 MAF per year, ranging from a high of around 2.5 MAF in 1989/90 to a low of about 1.5 MAF in 1997/98. In 2014/15, water sales are projected to be 1.75 MAF. Treated water sales are projected to be 910 TAF in 2014/15 and Exchanges 181 TAF.

4 Proof of Revenue

Based on expected sales of 1.75 MAF the expected revenues would be about $16.2million lower than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost-of-service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements, but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2015, the expected revenues for 2014/15 will be about $22.2million lower than the total revenue requirement in 2014/15. The total revenue requirement includes a $2.4million increase in the required reserves for the Revenue Remainder Fund. Draws from the Water Stewardship Fund and Treatment Surcharge

Stabilization Fund are $9.5 million and $4.4 million respectively in 2014/15. Accounting for these adjustments, the required draw from reserves is almost $6 million in 2014/15.

Schedule 12. FY 2014/15 Proof of Revenue if Rates Effective for Full Test Year ($ millions)

	Revenues if Rates Effective July 1st	Revenue Requirements	Difference	% Over (Under) Collected
Supply	246.3	247.3	(1.0)	0%
System Access Rate	446.3	448.0	(1.8)	0%
Water Stewardship Rate	71.8	81.2	(9.5)	-12%
System Power Rate	218.8	220.2	(1.5)	-1%
Treatment Surcharge	306.7	308.4	(1.7)	-1%
Readiness-to-serve Charge	157.0	157.5	(0.5)	0%
Capacity Charge	43.3	43.6	(0.3)	-1%
Total	**1,490.1**	**1,506.3**	**(16.2)**	**-1%**

Totals may not foot due to rounding

Schedule 13. FY 2014/15 Proof of Revenue if Rates Effective January 1 ($ millions)

	Revenues if Rates Effective Jan 1	Revenue Requirements	Difference	% Over (Under) Collected
Supply	238.5	247.3	(8.8)	-4%
System Access Rate	434.6	448.0	(13.4)	-3%
Water Stewardship Rate	71.8	81.2	(9.5)	-12%
System Power Rate	253.7	220.2	33.5	15%
Treatment Surcharge	286.8	308.4	(21.6)	-7%
Readiness-to-serve Charge	161.5	157.5	4.0	3%
Capacity Charge	37.3	43.6	(6.3)	-15%
Total	**1,484.1**	**1,506.3**	**(22.2)**	**-1%**

Totals may not foot due to rounding

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Metropolitan Water District of Southern California

Fiscal Year 2015/16Cost of Service Option 3

April2014

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List of Schedules and Tables

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1 Cost of Service

Prior to discussing the specific rates and charges that make up the rate structure, it is important to understand the cost of service process that supports the rates and charges. The purpose of the cost of service process is to: (1) identify which costs should be recovered through rates and charges; (2) organize Metropolitan's costs into service functions; (3) classify service function costs on the basis for which the cost was incurred; and (4) allocate costs to rate elements. The purpose of sorting Metropolitan's costs in a manner that reflects the type of service provided (e.g., supply vs. conveyance), the characteristics of the cost (e.g., fixed or variable) and the reason why the cost was incurred (e.g., to meet peak or average demand) is to create logical cost of service "building blocks". The building blocks can then be arranged to design rates and charges with a reasonable nexus between costs and benefits.

1.1 Cost of Service Process

The general cost of service process involves the four basic steps outlined below.

Step 1 - Development Of Revenue Requirements

In the revenue requirement step, the costs that Metropolitan must recover through rates and charges, after consideration of revenue offsets, are identified. The cash needs approach, an accepted industry practice for government-owned utilities, has historically been used in identifying Metropolitan's revenue requirements and was applied for the purposes of this study. Under the cash needs approach, revenue requirements include operating costs and annual requirements for meeting financed capital items (debt service, funding of replacement and refurbishment from operating revenues, etc.).

Step 2 – Identification Of Service Function Costs

In the functional allocation step, revenue requirements are allocated to different categories based on the operational functions served by each cost. The functional categories are identified in such a way as to allow the development of logical allocation bases. The functional categories used in the cost of service process include:

- Supply
- Conveyance and Aqueduct
- Storage
- Treatment
- Distribution
- Demand Management
- Administrative and General
- Hydroelectric

In order to provide more finite functional allocation, many of these functional categories are subdivided into more detailed sub-functions in the cost of service process. For example, costs for the Supply and Conveyance and Aqueduct functions are further subdivided into the sub-functions State Water Project (SWP), Colorado River Aqueduct (CRA), and Other. Similarly, costs in the Storage function are broken down into the sub-functions Emergency Storage, Drought Carryover Storage, and Regulatory Storage.

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Step 3 - Classification Of Costs

In the cost classification step, functionalized costs are separated into categories according to their causes and behavioral characteristics. Proper cost classification is critical in developing a rate structure that recovers costs in a manner consistent with the causes and behaviors of those costs. Under American Water Works Association (AWWA) guidelines, cost classification may be done using either the Base/Extra-Capacity approach or the Commodity/Demand approach. In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Step 4 - Allocation Of Costs To Rate Design Elements

The allocation of costs to the rate design elements depends on the purpose for which the cost was incurred and the manner in which the member agencies use the Metropolitan system. For example, costs incurred to meet average system demands are typically recovered by dollar per acre-foot rates and are allocated based on the volume of water purchased by each agency. Rates that are levied on the amount or volume of water delivered are commonly referred to as volumetric rates as the customer's costs vary with the volume of water purchased. Costs incurred to meet peak distribution demands (referred to in this report as demand costs) are recovered through a peaking charge (the Capacity Charge) and are allocated to agencies based on their peak summer demand behavior. Costs incurred to provide standby service in the event of an emergency are referred to here as standby costs. Differentiating between costs for average usage and peak usage is just one example of how the cost of service process allows for the design of rates and charges that improves overall customer equity and efficiency. Figure 1 summarizes the cost of service process.

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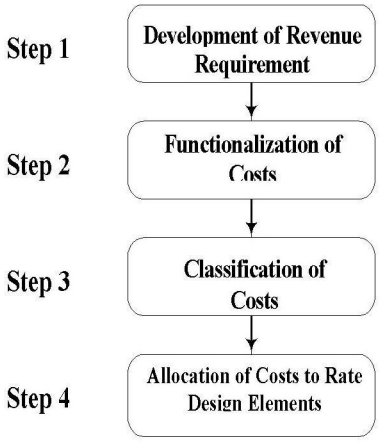
Figure 1. The Cost of Service Process



1.2 Revenue Requirements

The estimated revenue requirements presented in this report are for FY 2015/16. Throughout the report, FY 2015/16 is used as the "test year" to demonstrate the application of the cost of service process. Schedule 1 summarizes the FY 2015/16 revenue requirement by the major budget line items used in Metropolitan's budgeting process. Current estimates indicate Metropolitan's annual expenditures (including capital financing costs, but not construction outlays financed with bond proceeds, if any) will total approximately $1.651 billion in FY 2015/16.

The rates and charges do not have to cover this entire amount. Metropolitan generates a significant amount of revenue from interest income, hydroelectric power sales and miscellaneous income. These internally generated revenues are referred to as revenue offsets and are expected to generate about $58 million in FY 2015/16. It is expected that Metropolitan will also generate about $92 million in ad valorem property tax revenues (assuming that ad valorem tax rates are maintained at 0.0035% of assessed valuation). Property tax revenues are used to pay for a portion of Metropolitan's general obligation bond debt service, a portion of Metropolitan's obligation to pay for debt service on bonds issued to fund the State Water Project (SWP), and other SWP costs. The total revenue offsets for FY 2015/16 are estimated to be around $150 million. Therefore, the revenue required from rates and charges is the difference between the total costs and the revenue offsets, or $1.502 billion. Given an effective date of January 1, 2016, the rates and charges recommended in this report, combined with rates and charges effective through December 31, 2015 will generate a total of $1.494 billion in 2015/16.

All of Metropolitan's costs fall under the broad categories of Departmental Costs or General District Requirements. Departmental Costs include budgeted items identified with specific organizational groups. General District Requirements consist of requirements associated with the Colorado River

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Aqueduct (CRA), SWP, the capital financing costs associated with the Capital Investment Plan (CIP), and Water Management Programs. General District Requirements also include reserve fund transfers required by bond covenants and Metropolitan's Administrative Code.

When considered in total, General District Requirements make up approximately 70 percent of the absolute value of the allocated costs. The largest component of the revenue requirement relates tothe capital financing program at $535 million, which makes up approximately 30 percent of Metropolitan's FY 2015/16 revenue requirements. Capital financing costs include pay-as-you-go funding of the CIP at $210 million. Metropolitan's SWP costsis the second largest component of the revenue requirement at $515 million, constituting approximately 29 percent of the revenue requirement. Metropolitan's SWP contract requires Metropolitan to pay its allocated share of the capital, minimum operations, maintenance, power and replacement costs incurred to develop and convey its water supply entitlement, irrespective of the quantity of water Metropolitan takes delivery of in any given year. Departmental O&M costs at $391 million make up 22 percent of the total revenue requirement in FY 2015/16. Water System Operations is the largest single component of the Departmental Costs and accounts for 12 percent of the revenue requirements. Water System Operations responsibilities include operating and maintaining Metropolitan's pumping, storage, treatment, and hydroelectric facilities, as well as the CRA and other conveyance and supply facilities.

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Schedule 1. Revenue Requirements (by budget line item)

	Fiscal Year Ending 2016	% of Revenue Requirements (1)
Departmental Operations & Maintenance		
Office of the General Manager & Human Resources	$ 25,768,716	1.4%
External Affairs	17,188,606	1.0%
Water System Operations	215,676,523	12.0%
Chief Financial Officer	9,187,432	0.5%
Business Technology & Engineering Services	84,984,360	4.7%
Real Property Development & Mgmt	5,289,803	0.3%
Water Resource Management	16,340,755	0.9%
Ethics Department	990,943	0.1%
General Counsel	12,598,621	0.7%
Audit Department	2,925,708	0.2%
Total	**390,951,466**	**21.7%**
General District Requirements		
State Water Project	515,004,362	28.6%
Colorado River Aqueduct Power	36,503,152	2.0%
Supply Programs	66,451,886	3.7%
Demand Management	61,654,768	3.4%
Capital Financing Program	534,707,370	29.7%
Operating Equipment and Leases	26,634,780	1.5%
Increase (Decrease) in Required Reserves	19,600,000	1.1%
Total	**1,260,556,317**	**70.0%**
Revenue Offsets	**(149,699,116)**	**8.3%**
Net Revenue Requirements	**$ 1,501,808,668**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
Totals may not foot due to rounding

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1.3 Service Function Costs

Several major service functions result in the delivery of water to Metropolitan's member agencies. These include the supply itself, the conveyance capacity and energy used to move the supply, storage of water, distribution of supplies within Metropolitan's system, and treatment of these supplies. Metropolitan's rate structure recovers the majority of the cost of providing these functions through rates and charges.

The functional categories developed for Metropolitan's cost of service process are consistent with the AWWA rate setting guidelines, a standard chart of accounts for utilities developed by the National Association of Regulatory Utility Commissioners (NARUC), and the National Council of Governmental Accounting. Because all water utilities are not identical, the rate structure reflects Metropolitan's unique physical, financial, and institutional characteristics, as permitted under the AWWA guidelines.

A key goal of functional allocation is to maximize the degree to which rates and charges reflect the costs of providing different types of service. For functional allocation to be of maximum benefit, two criteria must be kept in mind when establishing functional categories.

- The categories should correlate charges for different types of service with the costs of providing those different types of service; and
- Each function should include reasonable allocation bases by which costs may be allocated.

Each of the functions developed for the cost of service process is described below.

- *Supply.* This function includes costs for those SWP and CRA facilities and programs that relate to maintaining and developing supplies to meet the member agencies' demands. For example, Metropolitan's supply related costs include investments in the Conservation Agreement with the Imperial Irrigation District and the Palo Verde Irrigation District (PVID) Program from the Colorado River supply programs. The SWP programs include transfer programs such as Kern Delta Program, Semitropic Water Storage Program, Yuba Accord Program, and the Arvin-Edison Water Storage Program. Costs for in-basin programs within Metropolitan's service area, such as Conjunctive Use Programsare also included.
- *Conveyance and Aqueduct.* This function includes the capital, operations, maintenance, and overhead costs for SWP and CRA facilities that convey water through Metropolitan's internal distribution system. Variable power costs for the SWP and CRA are also considered to be Conveyance and Aqueduct costs but are separately reported under a "power" sub-function. Conveyance and Aqueduct facilities can be distinguished from Metropolitan's other facilities primarily by the fact that they do not typically include direct connections to the member agencies. For purposes of this study, the Inland Feeder Project functions as an extension of the SWP East Branch and is therefore considered a Conveyance and Aqueduct facility as well.
- *Storage.* Storage costs include the capital financing, operating, maintenance, and overhead costs for Diamond Valley Lake, Lake Mathews, Lake Skinner, and five smaller regulatory reservoirs within the distribution system. Metropolitan's larger storage facilities are operated to provide: (1) emergency storage in the event of an earthquake or similar system outage; (2) drought storage that produces additional supplies during times of shortage; and (3) regulatory storage to balance system demands and supplies and provide for operating

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flexibility. To reasonably allocate the costs of storage capacity among member agencies, the storage service function is categorized into sub-functions of emergency, drought, and regulatory storage.

- *Treatment.* This function includes capital financing, operating, maintenance, and overhead costs for Metropolitan's five treatment plants and is considered separately from other costs so that treated water service may be priced separately.
- *Distribution.* This function includes capital financing, operating, maintenance, and overhead costs for the "in-basin" feeders, canals, pipelines, laterals, and other appurtenant works. The "in-basin" facilities are distinguished from Conveyance and Aqueduct facilities at the point of connection to the SWP, Lake Mathews, and other major turnouts along the CRA facilities.
- *Demand Management.* A separate demand management service function has been usedto clearly identify the cost of Metropolitan's investments in local resources like conservation, recycling, and desalination.
- *Administrative and General (A&G).* These costs occur in each of the Groups' departmental budgets and reflect overhead costs that cannot be directly functionalized. The cost-of-service process allocates A&G costs to the service functions based on the labor costs of non-A&G dollars allocated to each function.
- *Hydroelectric.* Hydroelectric costs include the capital financing, operating, maintenance, and overhead costs incurred to operate the 16 small hydroelectric plants located throughout the water distribution system.

1.3.1 Functional Allocation Bases

The functional allocation bases are used to allocate costs to the various service functions. The primary functional allocation bases used in the cost-of-service process are listed below.

- Direct assignment
- Net Book Value plus Work-In-Progress
- Prorating in proportion to other allocations
- Manager analysis
- Prior year results

Schedule 2 summarizes the amounts of total cost allocated using each of the above types of allocation bases.

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Schedule 2. Summary of Functional Allocations by Type of Allocation Basis

Primary Functional Allocation Bases		Estimated for FY 2016	% of Allocated Dollars
Direct Assignment	$	955,142,911	53.0%
Net Book Value/Work in Progress		580,851,933	32.2%
Prorating		87,722,070	4.9%
Manager Analysis		35,315,288	2.0%
Prior-Year Results		75,722,811	4.2%
Other	$	66,451,886	3.7%
Total Dollars Allocated	**$**	**1,801,206,900**	**100.0%**
Portion of Above Allocations Relating to:			
Revenue Requirements before Offsets		1,651,507,784	
Revenue Offsets		149,699,116	
Total Dollars Allocated	**$**	**1,801,206,900**	

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Each of the primary allocation bases is discussed in detail in the remainder of this section. Discussion of each allocation basis includes examples of costs allocated using that particular basis.

(a) Direct assignment

Direct assignment makes use of a clear and direct connection between a revenue requirement and the function being served by that revenue requirement. Directly assigned costs typically include: Costs associated with specific treatment plants, purely administrative costs, and certain distribution and conveyance departmental costs. Examples of costs that are directly assigned to specific functional categories are given below.

* Water System Operations Group departmental costs for treatment plants are directly assigned to treatment.
* Transmission charges for SWP are directly assigned to conveyance.

(b) Net Book ValuePlus Work-In-Progress

Capital financing costs, including debt service and funding replacements and refurbishments from operating revenues, comprise about 30percent of Metropolitan's annual revenue requirements. One approach would be to allocate payments on each debt issue in direct proportion to specific project expenditures made using bond proceeds. But, this approach would result in a high degree of volatility in relative capital cost allocations from year to year.
The approach used in this analysis is one widely used in water industry cost of service studies. Capital and debt-related costs (including repair and replacement costs paid from current revenues) are allocated on the basis of the relative net book values of fixed assets plus work in progress for assets under construction within each functional category. This approach produces capital cost allocations that are consistent with the functional distribution of assets. Also, since the allocation basis is tied to fixed asset records rather than debt payment records, the resulting allocations are more reflective of the true useful lives of assets. Use of net book values as an allocation basis provides an improved matching of functional costs with asset lives. A listing of fixed asset net book values summarized by asset function is shown in Schedule 3.

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Schedule 3. Net Book Value and Work in Progress Allocation Base

Functional Categories	NBV for FY 2016	% of Total NBV
Source of Supply	$ 30,274,044	0.4%
Conveyance & Aqueduct	1,809,704,101	20.9%
Storage	2,140,326,295	24.7%
Treatment	2,752,343,054	31.8%
Distribution	1,455,183,855	16.8%
Administrative & General	332,149,508	3.8%
Hydroelectric	129,745,901	1.5%
Total Fixed Assets Net Book Value	**$ 8,649,726,758**	**100.0%**

Totals may not foot due to rounding

In most instances, the cost-of-service process uses net book value*plus* work-in-progress to develop allocation bases for debt and capital costs.

Examples of revenue requirements allocated using these net book valueand work-in-progress allocations are shown below.

* Revenue Bond Debt Service: *allocated using Net Book Value plus Work In Progress.*
* Annual deposit of operating revenue to replacement and refurbishment fund: *allocated using Net Book Value plus Work In Progress.*

To calculate the relative percentage of fixed assets in each functional category, Metropolitan staff conducted a detailed analysis of historical accounting records and built a database of fixed asset accounts that contains records for all facilities currently in service and under construction. Each facility was sorted into the major service function that best represented the facilities primary purpose and was then further categorized into the appropriate sub-functions described earlier.

(c) Prorating in proportion to other allocations

Utility cost of service studies frequently contain line items for which it would be difficult to identify an allocation basis specific to that line item. In these cases, the most logical allocation basis is often a prorata blend of allocation results calculated for other revenue requirements in the same departmental group, or general category. Reasonable prorata allocations are based on a logical nexus between a cost and the purpose which it serves. For example: Human Resources Section costs are allocated using all labor costs, since Human Resources spends its time and resources attending to the labor force.

(d) Manager analyses

The functional interrelationships of some organizational units are so complex and/or dynamic that reliable allocation bases can only be developed with extensive input from the organization's

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managers. In these cases, managers use their firsthand knowledge of the organization's internal operations to generate a functional analysis of departmental costs. For example, Fleet Services Unit costs are allocated to treatment, storage, conveyance and distribution based on vehicle count by location.

(e) Prior year results

If available, accounting data for the prior fiscal year by appropriation are used to functionalize Departmental O&M costs for several units or sections. Many of the appropriations parallel the service functions used in the cost of service. For example, Conveyance and Distribution Section costs are allocated to distribution, hydroelectric, and conveyance functions based on the prior year accounting data by appropriation.

A summary of the functional allocation results is shown in Schedules 4 and 5. Schedule 4 provides a breakdown of the revenue requirement for FY 2015/16 into the major service functions and sub-functions prior to the redistribution of administrative and general costs. Schedule 5 serves as a cross-reference summarizing how the budget line items are distributed among the service functions. The largest functional component of Metropolitan's revenue requirement is the Conveyance and Aqueduct function, which constitutes approximately 37 percent of the allocated revenue requirement.

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Schedule 4. Revenue Requirement (by service function)

Functional Categories	Fiscal Year Ending 2016	% of Allocated Dollars (1)
Source of Supply		
CRA	$ 49,574,843	3.3%
SWP	96,954,181	6.4%
Other Supply	11,583,936	0.8%
Total	**158,112,960**	**10.5%**
Conveyance & Aqueduct		
CRA		
CRA Power (net of sales)	49,029,263	3.2%
CRA All Other	52,363,760	3.5%
SWP		
SWP Power	193,116,337	12.8%
SWP All Other	182,214,861	12.1%
Other Conveyance & Aqueduct	88,925,404	5.9%
Total	**565,649,625**	**37.4%**
Storage		
Storage Costs Other Than Power		
Emergency	68,446,709	4.5%
Drought	57,463,479	3.8%
Regulatory	17,229,366	1.1%
Wadsworth plant pumping/generation	(1,520,282)	0.1%
Total	**141,619,272**	**9.6%**
Treatment		
Jensen	60,746,471	4.0%
Weymouth	63,388,281	4.2%
Diemer	59,498,236	3.9%
Mills	30,788,895	2.0%
Skinner	66,387,052	4.4%
Total	**280,808,934**	**18.6%**
Distribution	157,077,485	10.4%
Demand Management	71,685,973	4.7%
Hydroelectric	(3,065,507)	0.2%
Administrative & General	129,919,925	8.6%
Total Functional Allocations:	**$ 1,501,808,668**	**100.0%**

(1) Given as a percentage of the absolute values of total dollars allocated.
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Schedule 5. Service Function Revenue Requirements (by budget line item)

Fiscal Year Ending 2016	Source of Supply	Conveyance & Aqueduct	Storage	Water Quality	Treatment	Distribution	Demand Management	Hydro Electric	Administrative & General	Total $ Allocated
Departmental Operations & Maintenance										
Office of the General Manager & Human Resources	$ 1,203,318	$ 8,964,397	$ 792,987	$ -	$ 4,419,717	$ 3,027,311	$ 370,259	$ 293,646	$ 6,697,083	$ 25,768,716
External Affairs	-	-	-	-	-	-	2,897,383	-	14,291,223	17,188,606
Water System Operations	12,546,789	38,317,628	3,528,311	-	97,792,705	57,158,424	8,160	5,370,823	953,683	215,676,523
Chief Financial Officer	-	-	-	-	-	-	-	-	9,187,432	9,187,432
Business Technology & Engineering Services	2,496,064	10,644,224	8,988,988	-	18,315,713	11,055,946	735,770	1,032,911	31,714,743	84,984,360
Real Property Development & Mgmt	-	-	5,289,803	-	-	-	-	-	-	5,289,803
Water Resource Management	9,380,797	-	-	-	128,775	1,152,505	5,485,083	-	193,594	16,340,755
Ethics Department	-	-	-	-	-	-	-	-	990,943	990,943
General Counsel	-	-	-	-	-	-	-	-	12,598,621	12,598,621
Audit Department	-	-	-	-	-	-	-	-	2,925,708	2,925,708
Total Departmental O&M	25,626,969	57,926,248	18,600,089	-	120,656,910	72,394,186	9,496,655	6,697,379	79,553,028	390,951,466
General District Requirements										
State Water Project	78,539,665	436,464,698	-	-	-	-	-	-	-	515,004,362
Colorado River Aqueduct Power	-	36,503,152	-	-	-	-	-	-	-	36,503,152
Supply Programs	66,451,886	-	-	-	-	-	-	-	-	66,451,886
Demand Management	-	-	-	-	-	-	61,654,768	-	-	61,654,768
Capital Financing Program	1,789,848	106,992,491	126,539,384	-	170,143,885	101,933,794	-	7,670,777	19,637,190	534,707,370
Other Operating Costs	620,797	1,264,620	409,105	-	2,280,150	1,561,802	1,741,018	151,493	18,605,795	26,634,780
Increase (Decrease) in Required Reserves	-	-	-	-	-	-	-	-	19,600,000	19,600,000
Total General District Requirements	147,402,196	581,224,960	126,948,489	-	172,424,035	103,495,596	63,395,786	7,822,270	57,842,985	1,260,556,317
Revenue Offsets	(14,916,205)	(73,501,583)	(3,929,306)	-	(12,272,012)	(18,812,297)	(1,206,468)	(17,585,156)	(7,476,089)	(149,699,116)
Net Revenue Requirements	**$ 158,112,960**	**$ 565,649,625**	**$ 141,619,272**	**$ -**	**$ 280,808,934**	**$ 157,077,485**	**$ 71,685,973**	**$ (3,065,507)**	**$ 129,919,925**	**$ 1,501,808,668**

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1.4 Classified Costs

In the cost classification step, functionalized costs are further categorized based on the causes and behavioral characteristics of these costs. An important part of the classification process is identifying which costs are incurred to meet average demands vs. peak demands and which costs are incurred to provide standby service. As with the functional allocation process, the proposed classification process is consistent with AWWA guidelines, but has been tailored to meet Metropolitan's specific operational structure and service environment.

Two methods are discussed in the AWWA M1 Manual, Principles of Water Rates, Fees and Charges. These two methods are the Commodity/Demand method and the Base/Extra Capacity method.

In the simplest sense, these approaches offer alternative means of distinguishing between utility costs incurred to meet average or base demands and costs incurred to meet peak demands. The Commodity/Demand method allocates costs that vary with the amount of water produced to the commodity category with all other costs associated with water production allocated to the demand category. In the Base/Extra Capacity method, costs related to average demand conditions are allocated to the base category, and capacity costs associated with meeting above average demand conditions are allocated to the extra capacity category.

The Commodity/Demand approach was modified for its application to Metropolitan's rate structure by adding a separate cost classification for costs related to providing standby service. Analysis of system operating data indicated that a modified Commodity/Demand approach was most appropriate for developing Metropolitan's cost of service classification bases.

Classification categories used in the analysis include:

- Fixed demand costs
- Fixed commodity costs
- Fixed standby costs
- Variable commodity costs
- Hydroelectric costs

Demand costs are incurred to meet peak demands. Only the direct capital financing costs were included in the demand classification category. A portion of capital financing costs was included in the demand cost category because in order to meet peak demands additional physical capacity is designed into the system and, therefore, additional capital costs are incurred. Commodity costs are generally costs that tend to vary with the amount of water produced. Variable commodity costs include costs of chemicals, most power costs, and other cost components that increase or decrease in relation to the volume of water supplied. Fixed commodity costs include fixed operations and maintenance and capital financing costs that are not related to accommodating peak demands or standby service.

Standby service costs relate to Metropolitan's role in ensuring system reliability during emergencies such as an earthquake or an outage of a major facility like the Colorado River Aqueduct. The standby costs identified include the emergency storage capacity within the system, and the standby capacity within the conveyance and distribution systems.

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An additional component used in Metropolitan's cost classification process is the hydroelectric component. While not a part of most water utilities' cost classification procedures, the hydroelectric classification component is necessary to segregate revenue requirements carried from the hydroelectric function established in the functional allocation process. Hydroelectric revenue requirements are later embedded in the distribution function. Any net revenues generated by the hydroelectric operations offset the distribution costs and reduce the System Access Rate. All users of the distribution system benefit proportionately from the revenue offset provided by the sale of hydroelectric energy.

Schedule 6 provides the classification percentages used to distribute the service function costs into demand, commodity and standby service classification categories. All of the supply costs are classified as fixed commodity costs. Because these particular supply costs have been incurred to provide an amount of annual reliable system yield and not to provide peak demand delivery capability or standby service, they are reasonably treated as fixed commodity costs.

Costs for the Conveyance and Aqueduct (C&A) service function are classified into demand, commodity, and standby categories. Because the capital costs for C&A were incurred to meet all three classification categories, an analysis of C&A capacity usage for the test year was used to determine that 54 percent of the available conveyance capacity varies with the quantity of water produced. A system peak factor[1] of 1.4 was applied to the annual usage to determine that 24 percent of available capacity is used to meet peak monthly deliveries to the member agencies. The remaining portion of C&A, around 22 percent, is used for standby. The same classification percentages are applied to the CRA, SWP, and Other (Inland Feeder) Conveyance and Aqueduct sub-functions. The classification shares reflect the system average use of conveyance capacity and not the usage of individual facilities. All of the Conveyance and Aqueduct energy costs for pumping water to Southern California are classified as variable commodity costs and, therefore, are not shown in Schedule 6 because they carry through the classification step.

Storage service function costs for emergency, drought and regulatory storage are also distributed to the classification categories based on the type of service provided. Emergency storage costs are classified as 100 percent standby related. Emergency storage is a prime example of a cost Metropolitan incurs to ensure the reliability of deliveries to the member agencies. In effect, through the emergency storage capacity in the system, Metropolitan is "standing by" to provide service in the event of a catastrophe such as a major earthquake that disrupts regional conveyance capacity for an extended period of time. Drought carryover storage serves to provide reliable supplies by carrying over surplus supplies from periods of above normal precipitation and snow pack to drought periods when supplies decrease. Drought storage creates supply and is one component of the portfolio of resources that result in a reliable amount of annual system supplies. As a result, drought storage is classified as a fixed commodity cost, in the same manner as Metropolitan's supply costs. Regulatory storage within the Metropolitan system provides operational flexibility in meeting peak demands and flow requirements, essentially increasing the physical distribution capacity. Therefore, regulatory storage is classified in the same manner as distribution costs.

[1] Peak monthly deliveries to the member agencies average about 44 percent more than the average monthly deliveries.

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Distribution service function costs were classified as fixed commodity by using projected sales data for the test year. During this period, 44 percent of the system distribution capacity varies with the quantity of water produced. Distribution service function costs were classified as fixed demand by using three years of recorded non-coincident peaks. The difference between the three-year average non-coincident peak and the commodity flows divided by the system capacity, or 39 percent of the distribution capacity, was used to meet peak day demands. Although the Metropolitan distribution system has a great deal of operational flexibility, the total amount of distribution capacity was limited to the historical peak non-coincident[2] 24-hour daily flow of all the member agencies. The remaining 17 percent of distribution capacity is associated with standby service.

Treatment service function costs were also classified as fixed commodity by using projected treated deliveries to the member agencies for the test year. Treatment fixed demand percentage calculation uses system non-coincident peak factor applied to the test year usage; the remaining capacity is associated with standby service. Total treated water capacity of 4,204 cfs, the total design capacity of all the treatment plants, was used in the calculation. Administrative and general costs have been allocated to the classification categories by service function based on the ratio of classified non-A&G service function costs to total non-A&G service function costs.

[2] The term "non-coincident" means that the peak day flow for each agency may or may not coincide with the peak day system flow. Both non-coincident and coincident approaches to measuring peak demands are used in rate design approaches. A non-coincident approach is used in the rate design to capture the different operating characteristics of the member agencies (e.g., the distribution system is designed to meet peak demands in different load areas within the System that have non-coincident demands due to each member agencies unique operating characteristics).

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Schedule 6. Classification Percentages

Function	Classification Percentages: Fixed Commodity	Fixed Demand	Fixed Standby	Total % Classified	Comments
Source of Supply					
Colorado River Aqueduct	100%	0%	0%	100%	Supply costs classified as fixed commodity
State Water Project	100%	0%	0%	100%	Supply costs classified as fixed commodity
Conveyance & Aqueduct					
Colorado River Aqueduct	54%	24%	22%	100%	Demand percentage represents amount of system conveyance capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remainding conveyance capacity. SWP, CRA, and Other are treated the same due to the use of a uniform system-wide System Access Rate.
State Water Project	54%	24%	22%	100%	
Other	54%	24%	22%	100%	
Storage					
Emergency	0%	0%	100%	100%	Classifies as Standby (recovered by RTS)
Drought	100%	0%	0%	100%	Classified as fixed commodity (recovered by Supply Rates)
Regulatory	44%	39%	17%	100%	Classified the same way as distribution.
Treatment	30%	30%	40%	100%	Demand percentage represents amount of system treatment capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of treated water delivered. Standby percentage is the remaining treatment capacity. The same classification is applied to all five treatment plants due to the use of a uniform system-wide Treatment Surcharge.
Distribution	44%	39%	17%	100%	Demand percentage represents amount of system distribution capacity used to meet peak demands. Commodity percentage represents amount of capacity that is a function of the amount of water delivered. Standby percentage is the remaining distribution capacity. The same classification is applied to all distribution facilities due to the use of a uniform system-wide System Access Rate.

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A summary of cost classification results is shown in Schedule 7. Theclassification of the service function costs results in about 8 percent, or $127 million of the total revenue requirements, being allocated to the demand classification category. This amount represents a reasonable estimate of the annual fixed capital financing costs incurred to meet peak demands (plus the allocated administrative and general costs). A portion of Metropolitan's property tax revenue is allocated to C&A fixed demand costs and is used to pay for the general obligation bond debt service allocated to the C&A costs, and other SWP costs. This revenue offsets the amount that needs to be recovered through rates.

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Schedule 7. Service Function Revenue Requirements (by classification category)

Fiscal year ending 2016 Functional categories (by sub-Fuction)	Fixed Demand	Fixed Commodity	Fixed Standby	Variable Commodity	Hydroelectric	Total Classified
Source of Supply						
CRA	$ -	$ 55,748,977	$ -	$ -	$ -	$ 55,748,977
SWP	-	109,029,016	-	-	-	109,029,016
Other Supply	-	13,026,618	-	-	-	13,026,618
Subtotal: Source of Supply	-	177,804,611	-	-	-	**177,804,611**
Conveyance & Aqueduct						
CRA						
CRA Power	-	15,014,059	-	37,062,970	-	52,077,028
CRA All Other	3,469,482	51,686,959	3,257,746	-	-	58,414,186
SWP						
SWP Power	-	-	-	200,612,875	-	200,612,875
SWP All Other	11,669,919	180,696,160	10,957,727	-	-	203,323,806
Other Conveyance & Aqueduct	19,212,192	58,557,039	19,517,807	-	-	97,287,038
Subtotal: Conveyance & Aqueduct	34,351,593	305,954,216	33,733,281	237,675,845	-	**611,714,934**
Storage						
Storage Costs Other Than Power						
Emergency	-	9,900,032	62,626,966	-	-	72,526,998
Drought	-	64,620,076	-	-	-	64,620,076
Regulatory	6,311,647	9,702,832	2,730,536	-	-	18,745,014
Storage Power	-	-	-	(1,579,297)	-	(1,579,297)
Subtotal: Storage	6,311,647	84,222,940	65,357,501	(1,579,297)	-	**154,312,791**
Water Quality						
CRA	-	-	-	-	-	-
SWP	-	-	-	-	-	-
Other	-	-	-	-	-	-
Subtotal: Water Quality	-	-	-	-	-	**-**
Treatment	50,760,413	159,237,171	63,910,523	31,249,894	-	**305,158,001**
Distribution	35,437,427	122,333,950	15,330,889	-	-	**173,102,266**
Demand Management	-	80,613,863	-	-	-	**80,613,863**
Hydroelectric	-	-	-	-	(897,798)	**(897,798)**
Total Costs Classified	**$ 126,861,080**	**$ 930,166,752**	**$ 178,332,193**	**$ 267,346,441**	**$ (897,798)**	**$ 1,501,808,668**

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About 62 percent of the revenue requirement ($930 million) is classified as fixed commodity. These fixed capital and operating costs are incurred by Metropolitan to meet annual average service needs and are typically recovered by a combination of fixed charges and volumetric rates. Fixed capital costs classified to the Standby category total about $178 million and account for about 12 percent of the revenue requirements. Standby service costs are commonly recovered by a fixed charge allocated on a reasonable representation of a customer's need for standby service. The variable commodity costs for power on the conveyance and aqueduct systems, and power, chemicals and solids handling at the treatment plants change with the amount of water delivered to the member agencies. These costs are classified as variable commodity costs, total about $267 million, and account for about 18 percent of the total revenue requirement. Because of the variable nature of these costs, it is appropriate to recover them through volumetric rates.

2 Rates and Charges

Schedule 8 provides a cross-reference between the classified service function costs and their allocation to the rate design elements. The specifics of each rate design element are discussed in detail in the following section. Schedule 9 summarizes the rates and charges that would be effective on January 1, 2016 using the assumptions and methodology of this report. Average costs by member agency will vary depending upon an agency's RTS allocation, capacity charge and relative proportions of treated and untreated Tier 1 and Tier 2 purchases.

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Schedule 8. Classified Service Function Revenue Requirements (by rate design element)

Fiscal year ending 2016	Rate Design Elements							
Service Function by Classification Category	Supply Rates	System Access Rate	Water Stewardship Rate	System Power Rate	Capacity Charge	Readiness-to-Serve Charge	Treatment Surcharge	Total Costs Allocated
Supply								
Fixed Demand	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Fixed Commodity	177,804,611	-	-	-	-	-	-	177,804,611
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Supply	177,804,611	-	-	-	-	-	-	177,804,611
Conveyance and Aqueduct								
Fixed Demand	-	-	-	-	-	34,351,593	-	34,351,593
Fixed Commodity	-	305,954,216	-	-	-	-	-	305,954,216
Fixed Standby	-	-	-	-	-	33,733,281	-	33,733,281
Variable Commodity	-	-	-	237,675,845	-	-	-	237,675,845
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Conveyance and Aqueduct	-	305,954,216	-	237,675,845	-	68,084,873	-	611,714,934
Storage								
Fixed Demand	-	-	-	-	6,311,647	-	-	6,311,647
Fixed Commodity	64,620,076	19,602,865	-	-	-	-	-	84,222,940
Fixed Standby	-	-	-	-	-	65,357,501	-	65,357,501
Variable Commodity	(1,579,297)	-	-	-	-	-	-	(1,579,297)
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Storage	63,040,778	19,602,865	-	-	6,311,647	65,357,501	-	154,312,791
Treatment								
Fixed Demand	-	-	-	-	-	-	50,760,413	50,760,413
Fixed Commodity	-	-	-	-	-	-	159,237,171	159,237,171
Fixed Standby	-	-	-	-	-	-	63,910,523	63,910,523
Variable Commodity	-	-	-	-	-	-	31,249,894	31,249,894
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Treatment	-	-	-	-	-	-	305,158,001	305,158,001
Distribution								
Fixed Demand	-	-	-	-	35,437,427	-	-	35,437,427
Fixed Commodity	-	122,333,950	-	-	-	-	-	122,333,950
Fixed Standby	-	-	-	-	-	15,330,889	-	15,330,889
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	(897,798)	-	-	-	-	-	(897,798)
Subtotal: Distribution	-	121,436,152	-	-	35,437,427	15,330,889	-	172,204,468
Demand Management								
Fixed Demand	-	-	-	-	-	-	-	-
Fixed Commodity	-	-	80,613,863	-	-	-	-	80,613,863
Fixed Standby	-	-	-	-	-	-	-	-
Variable Commodity	-	-	-	-	-	-	-	-
Hydroelectric	-	-	-	-	-	-	-	-
Subtotal: Demand Management	-	-	80,613,863	-	-	-	-	80,613,863
Total								
Fixed Demand	-	-	-	-	41,749,074	34,351,593	50,760,413	126,861,080
Fixed Commodity	242,424,687	447,891,031	80,613,863	-	-	-	159,237,171	930,166,752
Fixed Standby	-	-	-	-	-	114,421,670	63,910,523	178,332,193
Variable Commodity	(1,579,297)	-	-	237,675,845	-	-	31,249,894	267,346,441
Hydroelectric	-	(897,798)	-	-	-	-	-	(897,798)
Total	**$ 240,845,390**	**$ 446,993,232**	**$ 80,613,863**	**$ 237,675,845**	**$ 41,749,074**	**$ 148,773,263**	**$ 305,158,001**	**$ 1,501,808,668**

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Schedule 9. Rates and Charges Summary

Effective January 1st	2014	2015	2016
Tier 1 Supply Rate ($/AF)	$148	$157	$154
Tier 2 Supply Rate ($/AF)	$290	$290	$290
System Access Rate ($/AF)	$243	$255	$258
Water Stewardship Rate ($/AF)	$41	$41	$41
System Power Rate ($/AF)	$161	$125	$137
Full Service Untreated Volumetric Cost ($/AF)			
Tier 1	$593	$578	$590
Tier 2	$735	$711	$726
Full Service Exchange Cost ($/AF)	$445	$421	$436
Treatment Surcharge ($/AF)	$297	$337	$343
Full Service Treated Volumetric Cost ($/AF)			
Tier 1	$890	$915	$933
Tier 2	$1,032	$1,048	$1,069
Readiness-to-Serve Charge ($M)	$166	$157	$150
Capacity Charge ($/cfs)	$8,600	$11,000	$10,700

2.1 System Access Rate (SAR)

The SAR is a volumetric[3] system-wide rate levied on each acre-foot of water that moves through the MWD system. The MWD system includes MWD's right to use SWP facilities for transportation of SWP and non-SWP water. All system users (member agency or third party) pay the SAR to use Metropolitan's conveyance and distribution system. To meet the board stated objective to collect all costs in 2015/16, the SAR would increase to $258 per acre-foot. The SAR recovers the cost of providing conveyance and distribution capacity to meet average annual demands. Current estimates indicate that the SAR revenue requirement will be about $447 million in FY 2015/16, or 30 percent of the total revenue requirement.

[3] A volumetric rate is a charge applied to the actual amount of water delivered.

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2.2 Water Stewardship Rate (WSR)

The WSR would remain unchanged at $41 per acre-foot. The WSR recovers the costs of providing financial incentives for existing and future investments in local resources including conservation and recycled water. These investments or incentive payments are identified as the "demand management" service function in the cost of service process. Demand management costs are classified as 100 percent fixed commodity costs and are estimated to be about $81 million in FY 2015/16, about 5 percent of the revenue requirement. The WSR is a volumetric rate paid by each acre-foot of water that moves through the Metropolitan system. All system users (member agency or third parties) will pay the same proportional costs for existing and future conservation and recycling investments.

Investments in conservation, recycling, and groundwater recovery decrease the region's overall dependence on imported water supplies from environmentally sensitive areas like the Bay-Delta; increase the overall level of water supply reliability in Southern California; reduce and defer system capacity expansion costs; and create available space to be used to complete water transfers. Because conservation measures and local resource investments reduce the overall level of dependence on the imported water system, more capacity is available in existing facilities for a longer period of time. The space in the system made available by conservation and recycling is open to all system users. Similar to the public benefit charges implemented in the electric and natural gas industries in California after "open access" (customer choice of supplier) was implemented, the regional and statewide benefits of demand management are assessed to all users of the Metropolitan system, regardless of the source of the imported water supply.

The benefits of demand management programs are recognized by section 130.5 of the MWD Act, enacted by S.B. 60 (Stats. 1999, ch. 414), which requires the Metropolitan to "place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." Because Metropolitan is mandated under S.B. 60 to fund water supply programs like conservation and recycling, it is appropriate to recover the costs of supporting these programs on all water moved through the system.

2.3 System Power Rate (SPR)

SPR would increase to $137 per acre-foot in 2016. The SPR is a volumetric rate that recovers the costs of pumping water to Southern California. The SPR recovers the cost of power for both the SWP and CRA. In FY 2015/16 the revenue requirement for the SPR is estimated to be about $238 million, about 16 percent of the total revenue requirement.

2.4 Treatment Surcharge

The treatment surcharge would increase to $343 per acre-foot to collect all treatment costs in 2015/16. The treatment surcharge is a system-wide volumetric rate set to recover the cost of providing treated water service. The treatment surcharge revenue requirement is expected to be about $305 million in FY 2015/16, almost 20 percent of the total revenue requirement. The treatment surcharge recovers all costs associated with providing treated water service, including commodity, demand and standby related costs. Significant capital improvements at Metropolitan's five treatment plants, such as the Ozone Retrofit Program at Weymouth, as well as refurbishments and improvement programs at all five treatment plants result in additional capital financing costs being allocated to the treatment surcharge.

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2.5 Capacity Charge

The Capacity Charge would decrease to $10,700 per cubic-foot-second of capacity during calendar year 2016. The decrease is due to the decrease in pay-as-you-go funding of the CIP. The capacity charge is levied on the maximum summer day demand placed on the distribution system between May 1 and September 30 for a three-calendar year period. The three-year period ending December 31, 2014 is used to levy the capacity charge effective January 1, 2016 through December 31, 2016. Demands measured for the purposes of billing the capacity charge include all firm demand, including wheeling service and exchanges.

The capacity charge is intended to pay for the cost of peaking capacity on Metropolitan's distribution system, while providing an incentive for local agencies to decrease their use of the Metropolitan system to meet peak day demands and to shift demands into lower use time periods particularly October through April. Over time, a member agency will benefit from local supply investments and operational strategies that reduce its peak day demand on the system in the form of a lower total capacity charge. The estimated capacity charge to be paid by each member agency in calendar year 2016 will be provided to the Board in April 2015.

2.6 Readiness-to-Serve Charge

The costs of providing standby service, such as emergency storage, are recovered by the RTS. Metropolitan's costs for providing emergency storage capacity within the system are estimated to be about $65 million in FY 2015/16. In addition, to simplify the rate design by reducing the number of separate charges, the demand and standby related costs identified for the conveyance and aqueduct service function, and standby costs for the distribution function, are also allocated to the RTS. These costs are estimated to be about $84million in FY 2015/16. The RTS would decrease to $150million in calendar year 2016. The decrease is due to the decrease in pay-as-you go funding of the CIP.

The RTS is allocated to the member agencies based on each agency's proportional share of a ten-year rolling average of all firm deliveries (including water transfers and exchanges that use Metropolitan system capacity). A ten-year rolling average leads to a relatively stable RTS allocation that reasonably represents an agency's potential long-term need for standby service under different demand conditions. Member agencies that so choose may have a portion of their total RTS obligation offset by standby charge collections levied by Metropolitan on behalf of the member agency. The detailed schedule with an estimate of each agency's RTS obligation for calendar year 2016 will be provided to the Board in April 2015.

2.7 Purchase Order

The Purchase Order determines the amount of water that can be purchased at the Tier 1 rate. The existing Amended and Restated Purchase Order agreements presently in effect expire December 31, 2014. The Purchase Order will be addressed in the second half of 2014.

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2.8 Tier 2 supply rate

The Tier 2 Supply Rate reflects Metropolitan's cost of purchasing water transfers north of the Delta. The Tier 2 Supply Rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and conservation. The Tier 2 Supply Rate would remain at its current level of $290 per acre-foot. At an expected average sales level of 1.75 million acre-feet, it is estimated that no acre-feet will be sold at the Tier 2 Supply Rate.

2.9 Tier 1 supply rate

The total revenue requirement for the supply service function is about $241 million in FY 2015/16. The Tier 1 Supply Rate would decrease to $154 per acre-foot in 2016. The Tier 1 Supply Rate is simply calculated as the amount of the total supply revenue requirement that is not recovered by the Tier 2 Supply Rate divided by the estimated amount of Tier 1 water sales. At an expected demand level of about 1.75 MAF, it is estimated that Metropolitan will sell about 1.57MAF at the Tier 1 Supply Rate in 2015/16.The two-tier pricing approach is closely linked to the Purchase Order and a base level of demand. The 2016 Tier 1 Annual Limit for all member agencies will be provided to the Board in April 2015.

3 Sales

Staff estimates of water sales used for developing the rate recommendation were based on current member agency demands and information and an expectation that demands will trend to levels expected under normal weather conditions. Since 1989/90, total sales have averaged about 2.00 MAF per year, ranging from a high of around 2.5 MAF in 1989/90 to a low of about 1.5 MAF in 1997/98. In 2015/16, water sales are projected to be 1.75 MAF. Treated water sales are projected to be 898 TAF in 2015/16, and Exchanges 179 TAF.

4 Proof of Revenue

Based on expected sales of 1.75 MAF the expected revenues would be about $3.1 million higher than the total revenue requirement, if the rates and charges were in effect the entire test year period. The cost-of-service allocation assuming a full twelve months of revenue is used to allocate costs among the various rate elements, but should not be interpreted as over- or under-collection during a given fiscal year. However, because the recommended rates do not take effect until January 1, 2016, the expected revenues for 2015/16 will be about $8million lower than the total revenue requirement in 2015/16. The total revenue requirement includes a $1.9million increase in the required reserves for the Revenue Remainder Fund. Draws from the Water Stewardship Fund are $8.9 millionin 2015/16. Accounting for these adjustments, the deposit to reserves is almost $2.8 million in 2015/16.

Schedule 10. FY 2015/16 Proof of Revenue if Rates Effective for Full Test Year ($ millions)

	Revenues if Rates Effective July 1st	Revenue Requirements	Difference	% Over (Under) Collected
Supply	241.9	240.8	1.1	0%
System Access Rate	451.5	447.0	4.5	1%
Water Stewardship Rate	71.8	80.6	(8.9)	-11%
System Power Rate	239.8	237.7	2.1	1%
Treatment Surcharge	307.9	305.2	2.7	1%
Readiness-to-serve Charge	150.0	148.8	1.2	1%
Capacity Charge	42.1	41.7	0.4	1%
Total	**1,505.0**	**1,501.8**	**3.1**	**0%**

Totals may not foot due to rounding

Schedule 11. FY 2015/16 Proof of Revenue if Rates Effective January 1 ($ millions)

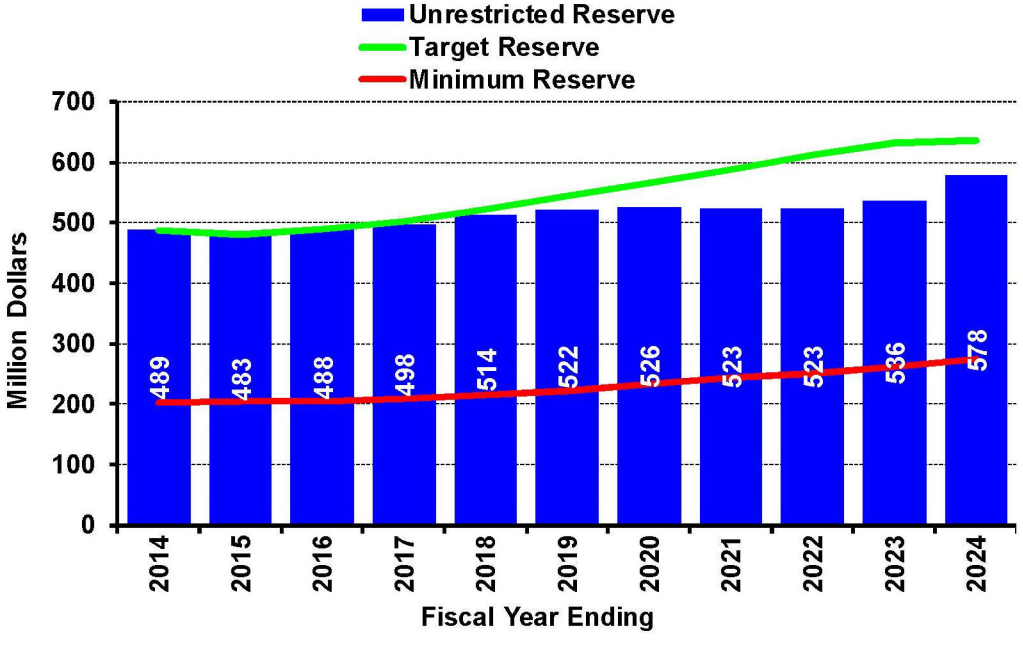
	Revenues if Rates Effective Jan 1	Revenue Requirements	Difference	% Over (Under) Collected
Supply	244.6	240.8	3.8	2%
System Access Rate	448.5	447.0	1.5	0%
Water Stewardship Rate	71.8	80.6	(8.9)	-11%
System Power Rate	227.8	237.7	(9.9)	-4%
Treatment Surcharge	304.9	305.2	(0.2)	0%
Readiness-to-serve Charge	153.5	148.8	4.7	3%
Capacity Charge	42.7	41.7	1.0	2%
Total	**1,493.8**	**1,501.8**	**(8.0)**	**-1%**

Totals may not foot due to rounding

Ten-Year Financial Forecast

The ability to ensure a reliable supply of high quality water for Metropolitan's 26 member agencies depends on the Metropolitan's ongoing ability to fund operations and maintenance, maintain and augment local and imported water supplies, fund replacements and refurbishment of existing infrastructure, and invest in system improvements. This ten-year plan supports long range resource, capital investment and operational planning. As such, it includes a forecast of future costs and the revenues necessary to support operations and investments in infrastructure and resources that are derived from the 2010 Update to the Integrated Resources Plan (2010 IRP Update) and other planning processes while conforming to Metropolitan's financial policies. These financial policies, which address reserve levels, financial indicators, and capital funding strategies, ensure sound financial management and fiscal stability for Metropolitan.

Figure 7. Projected Rate Increases, Reserves and Financial Indicators



Ave Rate Increase	5%	1.5%	1.5%	3.0%	3.0%	3.5%	5.0%	5.0%	5.0%	5.0%	5.0%
Sales, MAF	1.97	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
CIP, $M	200	245	268	275	281	284	293	304	312	317	313
PAYGO, $M	125	245	221	200	204	201	176	182	187	190	188
Rev. Bond Cvg	2.7	2.0	2.0	2.0	2.0	2.1	2.2	2.4	2.6	2.7	2.9
Fixed Chg Cvg	2.0	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4
Inflation	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
AV Taxes, $M	81	90	92	94	96	99	101	103	105	108	110
BDCP, $M				15	24	46	91	148	204	259	302

Figure 7 summarizes the financial metrics of the ten-year financial forecast. The ten-year forecast includes a rate forecast, based on Metropolitan's existing cost-of-service and rate structure. The forecast shows that the overall increase in water rates and charges will vary from 1.5 percent to 5 percent over the next ten years.

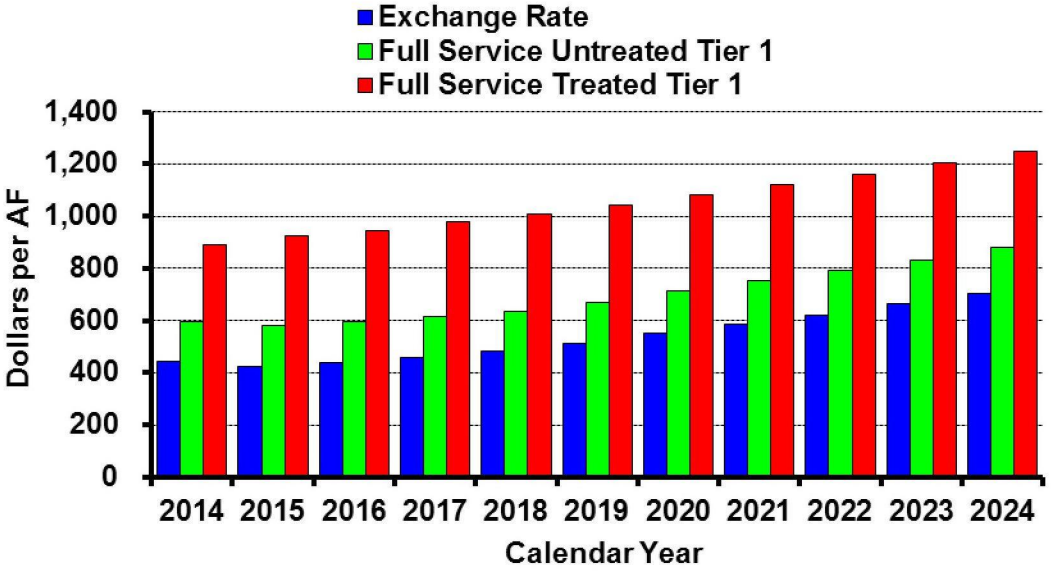
Table 9 shows the projected unbundled water rates and charges. Components of the rate structure may increase at different rates depending on the costs recovered. The full-service treated Tier 1 water rate is estimated to be approximately $1,233 per acre-foot by January 1, 2024, compared to $890 per acre-foot on January 1, 2014, an average increase of 3.3 percent per year over the ten-year period.

Table 9. Projected Water Rates and Charges

Rates and Charges Effective January 1st	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Tier 1 Supply Rate ($/AF)	$148	$158	$156	$156	$156	$156	$160	$164	$168	$171	$176
Tier 2 Supply Rate ($/AF)	$290	$290	$290	$290	$290	$290	$290	$290	$290	$290	$290
System Access Rate ($/AF)	$243	$257	$259	$268	$278	$291	$308	$328	$351	$373	$398
Water Stewardship Rate ($/AF)	$41	$41	$41	$41	$41	$41	$41	$41	$41	$41	$41
System Power Rate ($/AF)	$161	$126	$138	$150	$164	$179	$200	$215	$226	$243	$258
Full Service Untreated Volumetric Cost ($/AF)											
Tier 1	$593	$582	$594	$615	$639	$667	$709	$748	$786	$828	$873
Tier 2	$735	$714	$728	$749	$773	$801	$839	$874	$908	$947	$987
Exchange	$445	$424	$438	$459	$483	$511	$549	$584	$618	$657	$697
Treatment Surcharge ($/AF)	$297	$341	$348	$358	$360	$360	$360	$360	$360	$360	$360
Full Service Treated Volumetric Cost ($/AF)											
Tier 1	$890	$923	$942	$973	$999	$1,027	$1,069	$1,108	$1,146	$1,188	$1,233
Tier 2	$1,032	$1,055	$1,076	$1,107	$1,133	$1,161	$1,199	$1,234	$1,268	$1,307	$1,347
Readiness-to-Serve Charge ($M)	$166	$158	$153	$153	$154	$158	$169	$189	$214	$236	$260
Capacity Charge ($/cfs)	$8,600	$11,100	$10,900	$10,900	$11,500	$12,100	$12,100	$12,100	$12,200	$12,400	$12,500

Figure 8 shows the volumetric cost per acre-foot for Tier 1 Full Service untreated water, Tier 1 Full Service treated water, and untreated Exchange Water delivered pursuant to the 2003 Amended and Restated Exchange Agreement between Metropolitan and SDCWA.

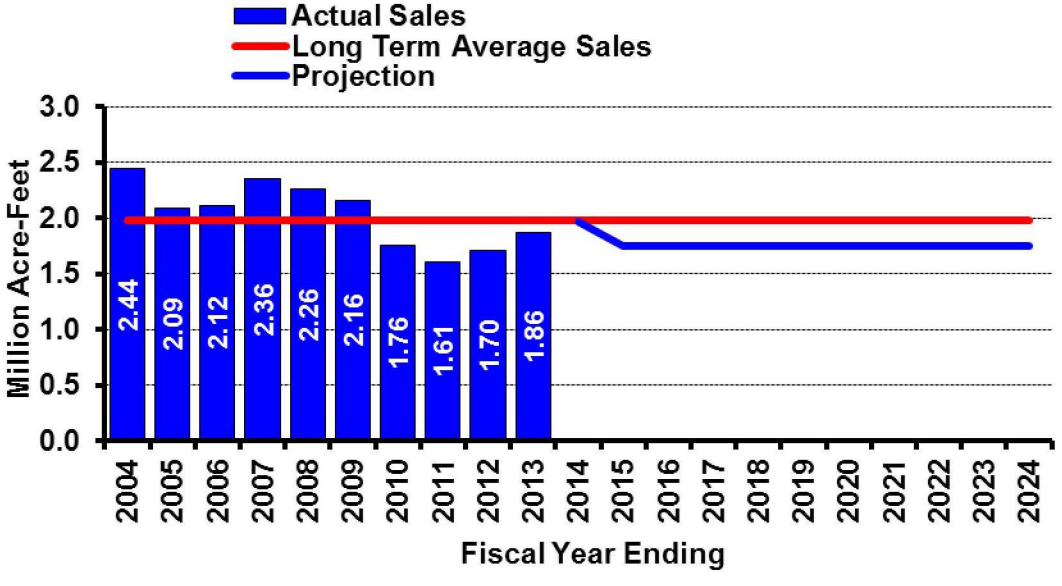
Figure 8. Projected volumetric Rates



These estimated rate increases result from increasing investments for the SWP and the BDCP, investments in reliability through conservation and local resources, system improvements to water treatment, investments to maintain the conveyance and distribution system, and increasing operating and maintenance costs. Annual expenditures, excluding funding of the Capital Investment Plan (CIP), are expected to increase from $1.4 billion in FY 2014/15 to $2.0 billion by FY 2023/24, or an annual average increase of about 4 percent. Metropolitan's share of the costs for the Bay Delta Conservation Plan (BDCP) is expected to increase to about $300 million by FY 2023/24. During this same period, capital investments are expected to be about $2.9 billion. To finance these capital investments, the ten-year forecast anticipates funding 100 percent of the CIP from PAYGo and Replacement and Refurbishment (R&R) funds for the first three fiscal years, then transitioning to funding 60% of the CIP from water sales revenues, or PAYGo. The balance of the CIP, or $0.7 billion, would be financed by issuing revenue bond debt.

Consistent with the 2010 IRP Update, future growth in retail demands is expected to be met either by the development of local supply resources or by conservation efforts necessary to meet the state mandate to reduce per capita retail water use by 20 percent by 2020. These impacts result in flat projected annual water sales over the ten-year period of 1.75 MAF, as shown in Figure 9.

Figure 9. Water Sales



SOURCES OF FUNDS

Revenues

Volumetric water revenues are expected to increase from $1.3 billion in FY 2014/15 to $1.8 billion in FY 2023/24. This increase is due to anticipated rate increases.

Fixed water charges (Readiness-to-Serve and Capacity Charge) are expected to increase from about $199.5 million in FY 2014/15 to $297.0 million in FY 2023/24.

Property tax revenue is expected to increase from $90.2 million in FY 2014/15 to $110.2 million in FY 2023/24. This projection assumes the Board maintains the ad valorem tax rate at .0035 percent of assessed valuations. By FY 2023/24 almost all of the revenues are used to pay SWP costs, which would include Metropolitan's share of BDCP costs.

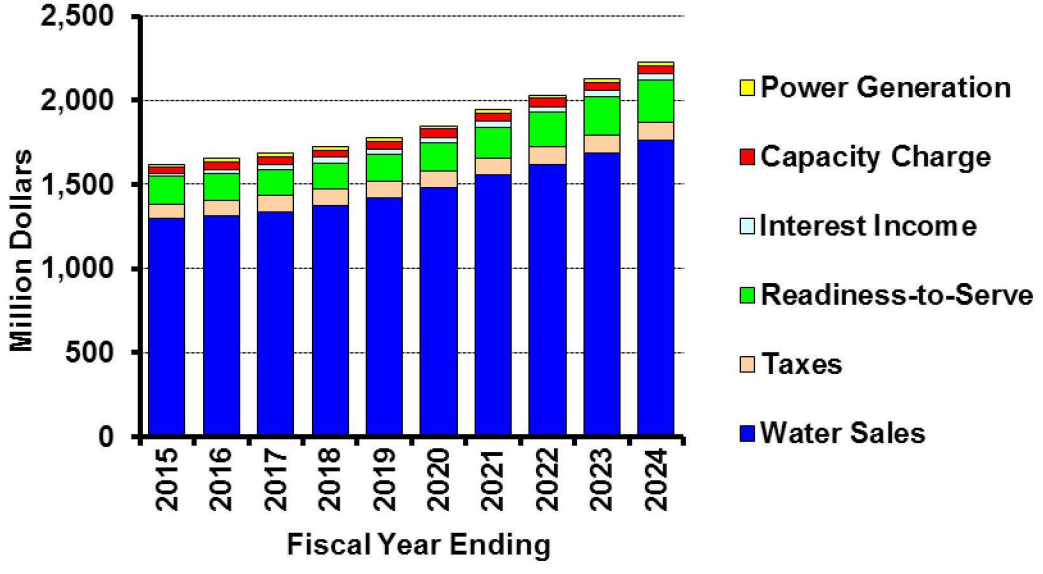
Power sales from Metropolitan's hydroelectric power recovery plants and excess CRA power are projected to average about $20.9 million per year over this period.

Interest income is projected to increase from $16.2 million in FY 2014/15 to $36.8 million in FY 2023/24 as a result of increased balances and higher average returns of 1.2 percent to 2.5 percent from FY 2014/15 to FY 2023/24.

Overall, volumetric water revenues continue to approximate 80% of total revenues throughout the period.

Forecasted revenues by major category are shown in Figure 10.

Figure 10. Revenue Forecast



Other Funding Sources

Other sources of funds include withdrawals from bond construction funds, Refurbishment and Replacement (R&R) Fund, General Fund, Water Stewardship Fund (WSF), Treatment Surcharge Stabilization Fund (TSSF), Water Rate Stabilization Fund (WRSF), and Revenue Remainder Fund.

USES OF FUNDS

Over the next ten years, total uses of funds are projected to range from $1.9 billion to $2.6 billion.

Expenses

Expenses are grouped into six major categories: SWP, O&M, demand management programs, CRA power costs, supply programs, and debt service & PAYGo funding. Figure 11 illustrates the general trends in expenses over the ten-year period from FY 2014/15 to FY 2023/24. Figure 12 shows the comparison of FY 2014/15 to FY 2023/24 in terms of the contribution of expenses to the total.

Figure 11. Expenditure Forecast

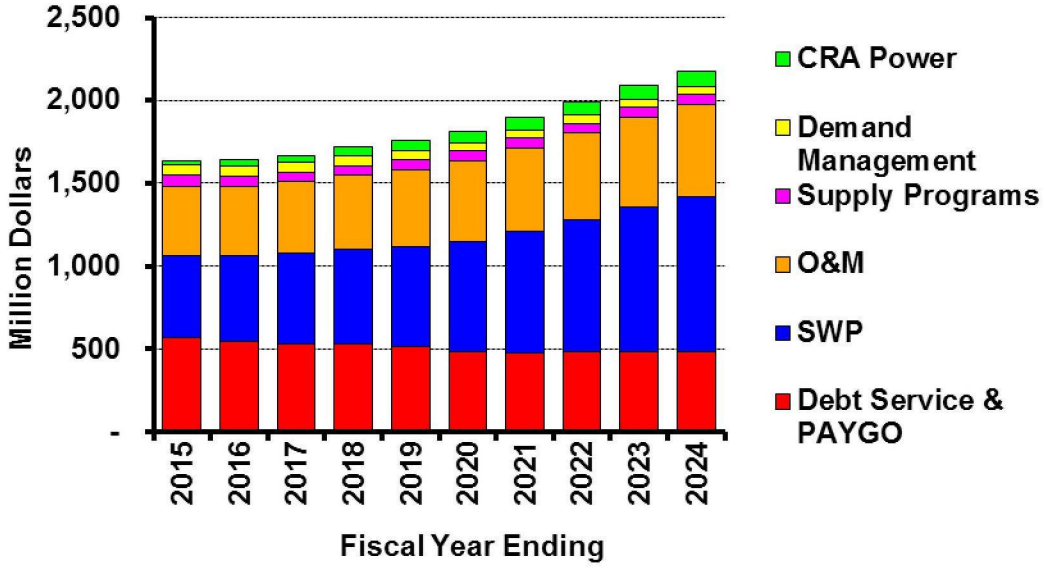
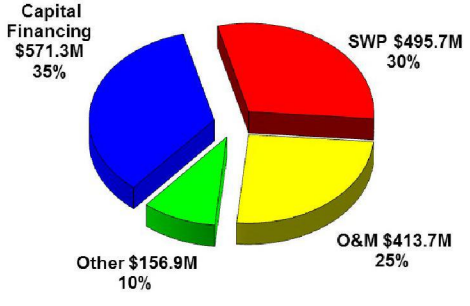
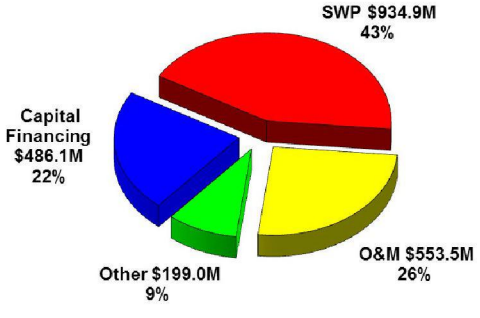


Figure 12. Expenditure Forecast, Contribution by Major Area

FY 2014/15: $1.64B



FY 2023/24: $2.17B



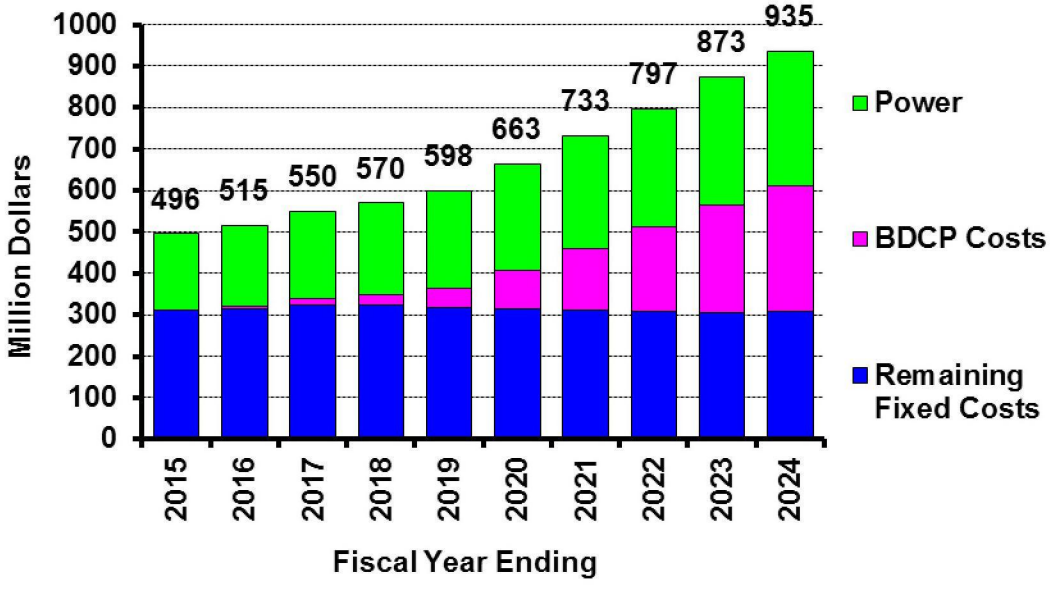
State Water Project

SWP expenditures are projected to increase from $496 million in FY 2014/15 to $935 million in FY 2023/24. The projection assumes the BDCP moves forward. These costs account for $302.0 million in FY 2023/24. The remainder of the fixed costs is based upon information provided by the DWR, and is associated with Transportation Capital and Minimum Operations & Maintenance, and the Delta Water Supply Capital and Minimum Operations & Maintenance. After adjusting downward in FY 2013/14, variable SWP power costs are projected to increase steadily beginning in FY 2014/15.

Power costs will vary depending on the price of electricity, total system deliveries, storage operations, and the amount of water pumped on the SWP. Increasing costs affecting the SWP include the cost of emissions allowance purchases directly and indirectly, the cost of adding renewable energy to the SWP power portfolio, and the cost of using the California Independent System Operator grid to transmit power from generation sources to the SWP load locations. Net flows through the SWP that incur power are expected to average 923 TAF per year.

The total SWP costs are shown in Figure 13.

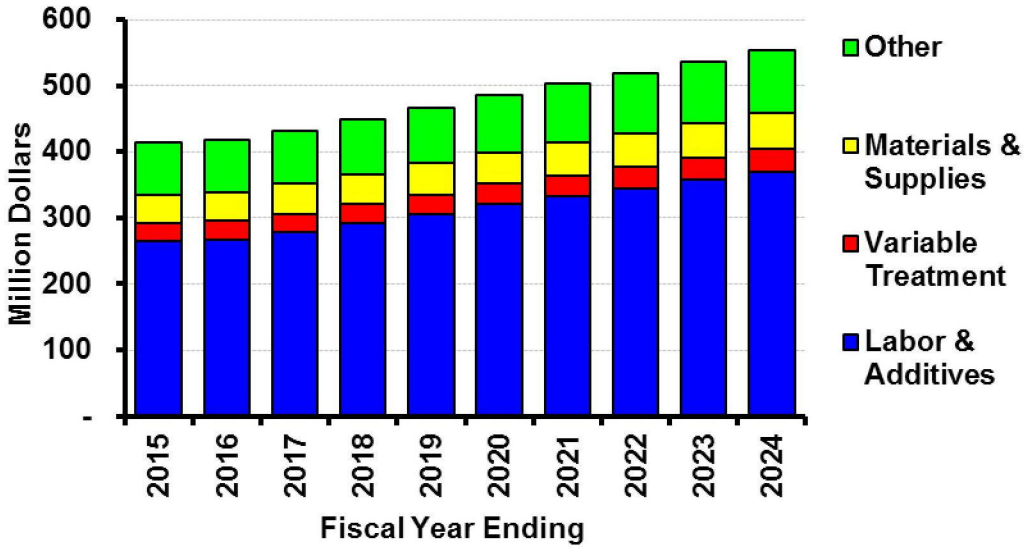
Figure 13. SWP Forecast



Operations and Maintenance

O&M costs in FY 2023/24 are projected to be $553.5 million. This represents an average annual increase of 3.3 percent from FY 2014/15 as a result of increasing labor, benefits, and treatment costs. During this time frame, inflation is assumed to be 2.5 percent. Items that are driving overall O&M costs up more rapidly than the rate of inflation include rising benefit costs for pensions and medical costs for active and retired employees. In addition, the ten-year forecast assumes Metropolitan fully funds the annual required contribution to meet future retiree medical costs (OPEB) much like promised retirement benefits, rather than paying for retiree medical costs on a pay-as-you-go basis.

Figure 14. O&M Forecast



Demand Management

Demand management costs include funding for the local resource programs (LRP) and Conservation Credit Program (CCP) are projected to decrease from $62.2 million in FY 2014/15 to $45.9 million in FY 2023/24. The LRP costs are projected to decrease from $42.2 million in FY 2014/15 to $25.9 million in FY 2023/24. The yield from the LRP is expected to decrease from 275 TAF in FY 2014/15 to 184 TAF in FY 2016/17 as more projects become cost effective when compared to Metropolitan's water rates. The CCP costs are projected to remain at $20.0 million throughout the ten-year period and provide continued funding of residential, commercial, and outdoor conservation programs. These programs reduce the need to transport water into the Metropolitan service area or within Metropolitan's distribution system.

CRA Power Costs

CRA Power costs are projected to increase from $29 million in FY 2014/15 to $90 million in FY 2023/24. Power costs will vary depending on the price of electricity, total system deliveries, storage operations, and the amount of water pumped on the CRA.

Colorado River diversions are expected to average 909 TAF from FY 2016/17 to FY 2023/24.

Water Transfers and Supply Programs

Supply programs vary slightly throughout the ten-year period from $65.5 million in FY 2014/15 to $63.2 million in FY 2023/24. The estimates represent expenditures for expected conditions. If extreme weather conditions are experienced, these cost estimates could be much higher or lower. If higher than normal demand is coupled with lower than normal supply, supply program costs could be more than four times higher. The proposed deposit of approximately $150 million of projected reserves over the target into a water transfer and management fund in FY 2013/14 will help ensure sufficient funds are available for these programs in the near term.

Capital Investment Plan

Metropolitan will be investing in infrastructure necessary to treat, store, and deliver water. Many of these investments will be required to repair and replace aging facilities, or Rehabilitation & Replacements (R&R). The ten-year projected CIP through FY 2023/24 is estimated at $2.9 billion. The major elements of the ten-year projected capital program are shown in Table 10. This table shows the CIP by major service function, driver and funding source. The CIP continues to reflect the deferral of facility expansion. The CIP focuses on projects that enhance reliability or provide an adequate return on investment while focusing on necessary refurbishment and replacement of aging infrastructure.

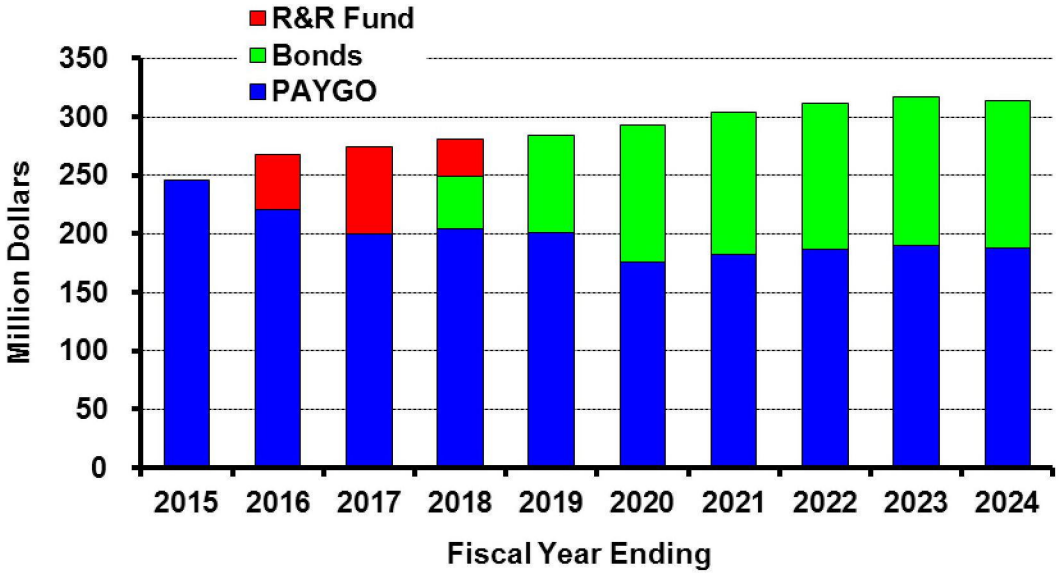
Figure 15 shows the funding source for the ten-year CIP.

Table 10. CIP Ten-Year Forecast and Funding Sources (dollars in millions)

Fiscal Year Ending	2015 Proposed	2016 Proposed	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	Total
Major Service Functions											
Supply	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Conveyance & Aqueduct	27.2	22.3	27.2	46.3	46.1	44.6	44.2	63.0	58.0	59.6	438.4
Storage	12.2	12.6	2.0	-	-	-	-	-	-	-	26.8
Distribution	43.5	51.6	69.8	112.7	135.7	157.6	191.6	178.8	199.4	204.1	1,344.8
Treatment	126.1	148.7	121.4	95.1	79.3	73.8	57.3	58.8	48.4	49.7	858.5
Administrative & General	28.1	30.4	50.4	26.5	23.2	16.7	11.0	11.4	11.7	-	209.4
Hydroelectric	8.2	2.3	4.1	0.5	0.1	0.7	0.1	-	-	-	15.9
Total	**245.4**	**267.9**	**274.8**	**281.1**	**284.4**	**293.4**	**304.1**	**312.0**	**317.4**	**313.4**	**2,893.8**
By Driver											
Efficiency	-	0.2	0.8	4.0	1.7	0.0	-	-	-	-	6.7
Infrastructure	193.5	212.3	240.4	269.3	279.2	292.0	304.1	312.0	317.4	313.4	2,733.6
Regulatory	7.4	10.1	12.3	1.5	-	-	-	-	-	-	31.3
Supply	1.1	-	-	-	-	-	-	-	-	-	1.1
Water Quality	43.5	45.3	21.2	6.2	3.5	1.4	0.0	-	-	-	121.1
Total	**245.4**	**267.9**	**274.8**	**281.1**	**284.4**	**293.4**	**304.1**	**312.0**	**317.4**	**313.4**	**2,893.8**
By System Improvements and R&R											
System Improvements	106.8	105.7	116.2	58.2	34.8	26.6	12.8	13.2	12.3	-	486.5
Rehabilitation and Replacements	138.6	162.1	158.6	222.9	249.6	266.8	291.3	298.8	305.1	313.4	2,407.3
Total	**245.4**	**267.9**	**274.8**	**281.1**	**284.4**	**293.4**	**304.1**	**312.0**	**317.4**	**313.4**	**2,893.8**
Funding Sources											
Bonds	-	-	-	45.2	83.4	117.4	122.1	125.0	127.4	125.4	745.8
R&R Fund	-	46.9	74.8	31.9	-	-	-	-	-	-	153.5
PAYGO	245.4	221.0	200.0	204.0	201.0	176.0	182.0	187.0	190.0	188.0	1,994.4
Total	**$ 245.4**	**$ 267.9**	**$ 274.8**	**$ 281.1**	**$ 284.4**	**$ 293.4**	**$ 304.1**	**$ 312.0**	**$ 317.4**	**$ 313.4**	**$ 2,893.8**

Totals may not foot due to rounding.

Figure 15. CIP Ten-Year Forecast and Funding Sources (dollars in millions)



The CIP will be funded from a combination of bond proceeds and operating revenues. In order to mitigate future increases in water rates, provide financial flexibility, and support Metropolitan's high credit ratings including maintaining revenue bond debt service and fixed charge coverage ratios, it is proposed that 60 percent of the CIP be funded from current revenues. This level of CIP funding is appropriate given that the 80 percent of the ten-year CIP is identified as R&R projects. Bond funded expenditures will include a combination of variable and fixed rate debt. Debt has been structured to mitigate near-term rate impacts and smooth out long-term debt service. Variable rate debt is used to mitigate interest cost over the long term, while mitigating interest rate exposure.

Debt Financing

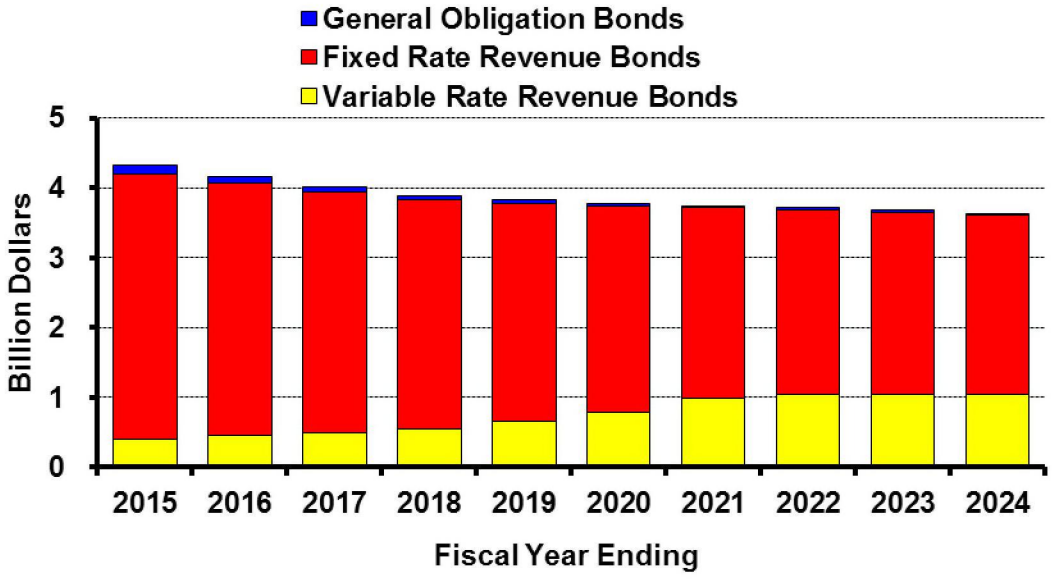
As shown in Table 10, it is anticipated that there will be about $2.9 billion of capital expenditures over this period. Of this, $745.8 million, or 26 percent of future capital expenditures, are anticipated to be funded by debt proceeds. Outstanding revenue bond debt currently represents $4.5 billion, or 63 percent of Metropolitan's $6.8 billion equity as of June 30, 2013. Metropolitan may not have outstanding revenue bond debt in amounts greater than 100 percent of its equity.

Total outstanding debt is illustrated in Figure 16. Total outstanding debt is estimated to decrease to $3.7 billion by FY 2023/24.

Metropolitan's variable rate debt as a percentage of total revenue bond debt is projected to increase to 29 percent over this time period as fixed rate debt is retired and new variable rate debt is issued. The appropriate amount of variable rate debt will continue to be monitored and adjusted depending on market rates, financing needs, available short-term investments, and fund levels in the investment portfolio with which variable rate interest exposure can be hedged.

General Obligation (GO) bond debt service will decrease from $23.2 million to $2.5 million per year as voter approved indebtedness matures.

Figure 16. Outstanding Debt



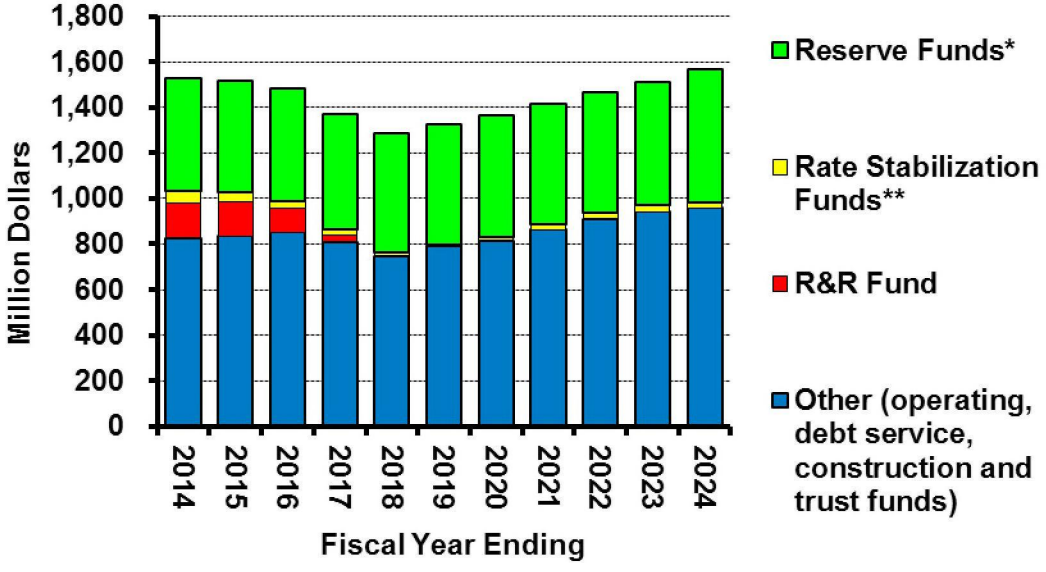
Other Obligations

The forecast accounts for required transfers to and from operating funds to meet revenue bond covenants and board policies. Over the next ten years, as costs continue to increase (most notably the reserve requirements for O&M Fund and State Water Contract Fund), the annual required transfer is estimated to average about $32.0 million per year.

FUND BALANCES AND RESERVES

As shown in Figure 16, over the next ten years, total fund balances are projected to increase to $1.63 billion in FY 2023/24.

Figure 16. End of Year Fund Balances



* includes Water Rate Stabilization Fund and Revenue Remainder Fund.
** includes Water Stewardship Fund and Treatment Surcharge Stabilization Fund.

FINANCIAL RATIOS

Metropolitan's financial objective is to maintain a minimum revenue bond coverage ratio of 2.0 times. The revenue bond coverage ratio is projected to be 2.0 times in FY 2014/15 and increase to 2.9 times in FY 2023/24. Revenue bond debt service coverage is the primary indicator of credit quality and is equal to the ratio of net operating revenues to revenue bond debt service.

Fixed charge coverage measures the amount by which net-operating revenues "cover" all recurring fixed costs including SWC capital obligations. This is a broader ratio than the revenue bond coverage ratio and is one measure used to gauge Metropolitan's overall financial strength. Metropolitan's financial policy goal is to maintain a minimum fixed charge coverage ratio of 1.2 times. For FY 2014/15 through FY 2023/24, the fixed charge coverage is projected to decrease from 1.6 times to 1.4 times. Table 11 summarizes uses and sources of funds over the ten-year period.

Table 11. Ten-Year Financial Forecast, Sources and Uses of Funds (dollars in millions)

Fiscal Year Ending	2014 Projected	2015 Proposed	2016 Proposed	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast
USES OF FUNDS											
Expenses											
State Water Contract	$ 426.0	$ 495.7	$ 515.0	$ 549.6	$ 569.8	$ 598.4	$ 663.0	$ 733.0	$ 797.1	$ 873.2	$ 934.9
Supply Programs	76.5	65.5	66.5	59.6	54.9	56.5	57.9	58.9	60.2	61.7	63.2
Colorado River Power	24.9	29.2	36.5	39.3	52.2	59.4	68.9	76.0	81.3	86.3	89.8
Debt Service	369.0	325.8	324.7	327.2	327.0	316.5	311.4	297.7	298.2	297.2	298.1
Demand Management	53.6	62.2	61.7	59.8	59.3	58.5	48.7	48.2	48.4	45.8	45.9
Departmental O&M	336.1	359.7	363.3	377.0	392.7	409.2	426.3	440.6	455.5	471.0	486.9
Treatment Chemicals, Solids & Power	26.4	26.6	27.6	27.7	28.4	29.4	30.7	32.1	32.8	33.5	34.2
Other O&M	128.0	27.5	26.6	27.3	28.0	28.7	29.4	30.1	30.9	31.7	32.5
Sub-total Expenses	**1,440.6**	**1,392.1**	**1,421.9**	**1,467.5**	**1,512.3**	**1,556.5**	**1,636.2**	**1,716.8**	**1,804.5**	**1,900.4**	**1,985.5**
Capital Investment Plan	**200.0**	**245.4**	**267.9**	**274.8**	**281.1**	**284.4**	**293.4**	**304.1**	**312.0**	**317.4**	**313.4**
Fund Deposits											
Water Transfer Fund	95.0	-	-	-	-	-	-	-	-	-	-
R&R and General Fund	225.0	245.4	221.0	200.0	204.0	201.0	176.0	182.0	187.0	190.0	188.0
Revenue Bond Construction	-	-	-	-	-	16.3	-	7.5	0.3	-	-
Water Stewardship Fund	14.1	-	-	-	-	-	2.1	2.0	1.4	4.3	3.8
Treatment Surcharge Stabilization Fund	-	-	0.4	0.9	0.8	-	5.3	6.9	1.0	-	-
Interest for Construction & Trust Funds	0.2	0.1	0.4	0.7	0.9	1.0	1.2	1.2	1.3	1.4	1.5
Increase in Required Reserves	8.6	9.9	18.2	19.2	10.2	33.1	41.8	49.9	53.5	43.9	39.9
Increase in Water Rate Stabilization Fun	-	-	4.3	6.9	9.2	0.6	-	-	-	2.5	28.5
Sub-total Fund Deposits	**342.9**	**255.5**	**244.3**	**227.7**	**225.1**	**252.0**	**226.4**	**249.6**	**244.6**	**242.1**	**261.7**
TOTAL USES OF FUNDS	**$ 1,983.5**	**$ 1,893.0**	**$ 1,934.1**	**$1,970.0**	**$2,018.4**	**$2,092.9**	**$2,155.9**	**$2,270.5**	**$2,361.1**	**$2,460.0**	**$2,560.6**
SOURCES OF FUNDS											
Revenues											
Taxes	$ 81.1	$ 90.2	$ 92.2	$ 94.3	$ 96.4	$ 98.6	$ 100.8	$ 103.1	$ 105.4	$ 107.8	$ 110.2
Annexations	-	-	-	-	-	-	-	-	-	-	-
Interest Income	7.7	16.2	27.9	33.8	32.7	32.7	33.4	34.1	35.1	35.9	36.8
Hydro Power	17.0	19.3	18.9	20.0	20.5	20.7	21.6	21.0	21.7	22.2	22.7
Fixed Charges (RTS & Capacity Charge	182.1	199.5	198.8	195.9	197.6	202.5	211.1	226.6	249.3	273.4	297.0
Water Sales Revenue	1,437.5	1,290.0	1,308.4	1,331.8	1,370.5	1,414.8	1,473.8	1,547.9	1,611.7	1,678.6	1,751.4
Miscellaneous Revenue	6.1	10.2	11.3	12.0	12.3	12.7	13.4	14.2	14.6	15.1	16.0
Bond Proceeds	-	-	-	-	39.9	99.7	109.7	129.6	129.1	129.0	119.0
Sub-total Revenues	**1,731.7**	**1,625.4**	**1,657.5**	**1,687.8**	**1,769.9**	**1,881.7**	**1,963.8**	**2,076.6**	**2,166.9**	**2,262.0**	**2,353.1**
Fund Withdrawals											
R&R and General Fund	130.0	245.4	267.9	274.8	235.9	201.0	176.0	182.0	187.0	190.0	188.0
Bond Funds for Construction	70.0	-	-	-	5.3	-	7.7	-	-	3.5	10.9
Water Stewardship Fund	-	9.5	8.8	7.4	7.3	8.1	-	-	-	-	-
Treatment Surcharge Stabilization Fund	0.5	4.4	-	-	-	2.2	-	-	-	4.5	8.6
Decrease in Required Reserves	-	-	-	-	-	-	-	-	-	-	-
Decrease in Rate Stabilization Fund	51.3	8.4	-	-	-	-	8.4	11.9	7.2	-	-
Sub-total Fund Withdrawals	**251.8**	**267.6**	**276.6**	**282.2**	**248.5**	**211.3**	**192.1**	**193.9**	**194.2**	**197.9**	**207.5**
TOTAL SOURCES OF FUNDS	**$ 1,983.5**	**$ 1,893.0**	**$ 1,934.1**	**$1,970.0**	**$2,018.4**	**$2,092.9**	**$2,155.9**	**$2,270.5**	**$2,361.1**	**$2,460.0**	**$2,560.6**
Fiscal Year Sales & Exchange (MAF)	**1.97**	**1.75**	**1.75**	**1.75**	**1.75**	**1.75**	**1.75**	**1.75**	**1.75**	**1.75**	**1.75**

Totals may not foot due to rounding.

Table 12. Ten-Year Financial Forecast, Coverage Ratios and Fund Balances (dollars in millions)

Fiscal Year Ending	2014 Projected	2015 Proposed	2016 Proposed	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast
RATIOS											
Fixed Charge Coverage	2.0	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.4	1.4
Revenue Bond Coverage	2.7	2.0	2.0	2.0	2.0	2.1	2.2	2.4	2.6	2.7	2.9
Var. Rate Debt as % of Rev. Bond Debt	9%	10%	11%	12%	14%	17%	21%	26%	28%	29%	29%
RESTRICTED FUNDS EOY balance											
General Fund	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1	116.1
Water Transfer Fund	119.9	119.9	119.9	60.0	-	-	-	-	-	-	-
Other	591.0	598.2	616.3	632.7	632.1	674.8	698.4	747.3	795.4	826.7	843.9
Sub-total Restricted Funds	**827.0**	**834.2**	**852.3**	**808.8**	**748.2**	**790.9**	**814.5**	**863.4**	**911.5**	**942.8**	**960.0**
UNRESTRICTED FUNDS EOY balance											
Reserve Funds (1)	496.1	490.5	495.3	505.7	521.3	529.5	532.8	530.7	530.6	543.6	585.4
Treatment Surcharge Stabilization Fund	4.4	0.0	0.5	1.4	2.2	0.0	5.3	12.3	13.3	8.8	0.2
Water Stewardship Fund	48.2	38.8	30.0	22.7	15.3	7.2	9.3	11.3	12.8	17.1	20.8
R&R Fund	153.5	153.5	106.7	31.9	-	-	-	-	-	-	-
General Fund	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Sub-total Unrestricted Funds	**703.1**	**683.8**	**633.4**	**562.5**	**539.7**	**537.7**	**548.4**	**555.2**	**557.5**	**570.4**	**607.4**
TOTAL FUNDS	**$ 1,530.1**	**$ 1,518.0**	**$ 1,485.7**	**$1,371.3**	**$1,287.9**	**$1,328.6**	**$1,362.9**	**$1,418.6**	**$1,469.0**	**$1,513.2**	**$1,567.4**

Totals may not foot due to rounding.

(1) includes Water Rate Stabilization Fund and Revenue Remainder Fund.

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

RESOLUTION ____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA FIXING AND ADOPTING WATER RATES TO BE EFFECTIVE JANUARY 1, 2015 AND 2016

WHEREAS, the Board of Directors ("Board") of The Metropolitan Water District of Southern California ("Metropolitan"), pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the "Act"), is authorized to fix such rate or rates for water that, so far as practicable, will result in revenue which, together with revenue from any water standby or availability service charge or assessment, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt; and

WHEREAS, on March 12, 2002, the Board adopted Resolution 8805, "Resolution Of The Board Of Directors Of The Metropolitan Water District Of Southern California Fixing And Adopting Rates And Charges For Fiscal Year 2002/03 And To Direct Further Actions In Connection Therewith", adopting a new structure for Metropolitan's water rates and charges in order to enhance Metropolitan's fiscal stability and ability to ensure the region's long-term water supply while reasonably and fairly allocating the cost of providing service to its member agencies; and

WHEREAS, the rate structure adopted by Resolution 8805 was the product of a three-year process that included a strategic planning process commenced by the Board in July 1998, discussions with member agencies, retail agencies and other stakeholders and numerous meetings of Metropolitan's Board, Audit, Budget and Finance Committee, Budget, Finance and Investment Committee and Subcommittee on Rate Structure Implementation; and

WHEREAS, development of the rate structure adopted by Resolution 8805 included Strategic Plan Policy Principles adopted by the Board on December 14, 1999 to provide a framework for the development of a revised rate structure; a Composite Rate Structure Framework adopted by the Board on April 11, 2000 (the "Rate Structure Framework"); a Rate Structure Action Plan adopted by the Board on December 12, 2000; and study of (i) a detailed rate design proposal presented in December 2000 (the "December 2000 Proposal") developed from the Rate Structure Framework and (ii) an alternative rate structure proposal presented in

September 2001 (the "Proposal") that addressed concerns which were raised about the December 2000 Proposal; and

WHEREAS, by Resolution 8774, "Resolution Of The Board Of Directors Of The Metropolitan Water District Of Southern California To Approve Rate Structure Proposal And To Direct Further Actions In Connection Therewith," adopted October 16, 2001, the Board approved the Proposal, which unbundled water rates and charges to reflect the different services provided by Metropolitan, and determined that the Proposal (i) was consistent with the Board's Strategic Plan Policy Principles, (ii) addressed issues raised during the consideration of the December 2000 Proposal, (iii) furthered Metropolitan's strategic objectives of ensuring the region's long term water supply reliability through encouragement of sound and efficient water resources management, water conservation, and accommodating a water transfer market, and (iv) enhanced the fiscal stability of Metropolitan; and

WHEREAS, by Resolution 8774, the Board directed the General Manager to (i) prepare a report on the Proposal describing each of the rates and charges and the cost of service process used to develop the rates and charges and (ii) utilize the Proposal as the basis for determining Metropolitan's revenue requirements and recommending rates to become effective January 1, 2003, in accordance with Metropolitan's annual rate-setting procedure under the Administrative Code; and

WHEREAS, on January 7, 2002, the General Manager presented to the Budget, Finance and Investment Committee (formerly the Audit, Budget and Finance Committee) a detailed report describing each of the rates and charges and the supporting cost of service process, dated December 2001 (the "Cost of Service Report"), that (i) described the rate structure process and design; (ii) identified revenue requirements; (iii) showed the costs of major service functions that Metropolitan provides to its member agencies, (iv) classified these service function costs based on the use of and benefit from the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges; and (iv) set forth the rates and charges necessary to defray such costs; and

WHEREAS, by Resolution 8805 the Board found and determined that the cost of service process reasonably and fairly: (i) identified revenue requirements; (ii) allocated costs to the service functions that Metropolitan provides to its member agencies; (iii) classified service function costs based upon use of and benefit from Metropolitan's system, and (iv) allocated costs to rates and charges based upon customary water industry standards; and

WHEREAS, by Resolution 8805 the Board found and determined that the water rates and charges were supported by the cost of service process and that such rates and charges reasonably and fairly allocated the costs of providing service of Metropolitan's water system to its member agencies and third-party transporters of water, if any; and

WHEREAS, the Board received the Final Report on Rates and Charges, dated June 28, 2002, that (i) described the rate structure process and design; (ii) identified revenue requirements; (iii) showed the costs of major service functions that Metropolitan provides to its member agencies, (iv) classified these service function costs based on the use of and benefit of the Metropolitan system to create a logical nexus between the costs and the revenues required

from each of the rates and charges; and (iv) set forth the rates and charges necessary to defray such costs; and

WHEREAS, Metropolitan's water rates approved by the Board thereafter (on March 11, 2003, March 9, 2004, March 8, 2005, March 14, 2006, April 10, 2007, March 11, 2008, April 14, 2009, April 14, 2010 and April 10, 2012) have utilized the unbundled water rate elements in the rate structure approved by Resolution 8774 and implemented by Resolution 8805 and

WHEREAS, the cost of service process supporting Metropolitan's water rates approved by the Board on March 11, 2003 and in following years is consistent with the cost of service process described in the Cost of Service Report. Raftelis Financial Consultants, Inc. ("RFC"), the firm engaged in 1998 to perform a comprehensive cost of service study and assist in the development of the rate structure, confirmed to the Board in a report dated April 6, 2010, that the fiscal year 2010/11 cost of service report presented to the Board in January 2010 was accurate and consistent with the Cost of Service Report and that the fiscal year 2010/11 cost of service report and rate methodology was consistent with water industry best practices and complies with cost of service and rate guidelines in the American Water Work's Association's Manual M-1, *Principles of Water Rates, Fees and Charges*; and

WHEREAS, in *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, San Francisco Superior Court Case Nos. CPF-10-510830 and CPF-12-512466, the San Diego County Water Authority challenged Metropolitan's water rates adopted on April 13, 2010 and April 10, 2012, and Metropolitan is defending such challenges; and

WHEREAS, Metropolitan maintains that its rate structure and such rates are appropriate. There is no final judgment in either of the cases, and Metropolitan does not anticipate a final judgment in the near term; and

WHEREAS, on January 30, 2014, the General Manager and Chief Financial Officer provided to the Board and the public a board letter describing the proposed biennial budget for fiscal years 2014/15 and 2015/16, identifying key assumptions, addressing key circumstances such as current state drought conditions, use of projected water rate stabilization reserves over the reserve target and continued suspension of the ad valorem rate restrictions under Section 124.5 of the MWD Act to allow Metropolitan to maintain the current ad valorem tax rate, incorporating a ten-year financial forecast; determining anticipated total revenues and revenues anticipated to be derived from water sales and firm revenue sources required during fiscal years 2014/15 and 2015/16, identifying revenue requirements for that period and recommending rates consistent with cost of service principles to be effective January 1, 2015 and January 1, 2016, and charges to be imposed in fiscal years 2014/15 and 2015/16, and explaining that costs and revenues may be at variance with forecasts and variations will be addressed, for example by contributions to, or withdraws from, financial reserves maintained for this purpose; and

WHEREAS, the proposed rates and the cost of service studies supporting the rate proposal also utilize the unbundled water rate elements in the rate structure approved by Resolution 8774 and implemented by Resolution 8805; and

WHEREAS, the January 30, 2014, board letter included a summary of the biennial budget for fiscal years 2014/15 and 2015/16, a ten-year financial forecast and detailed reports for fiscal years 2014/15 and 2015/16 describing the recommended rates and charges and the supporting cost of service that (i) describe the rate structure process and design, (ii) identify revenue requirements; (iii) show the costs of major service functions that Metropolitan provides to its member agencies, (iv) classify these service function costs based on the use of and benefit from the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges, and (iv) set forth the specific rates and charges necessary to defray such costs; and

WHEREAS, the detailed proposed departmental biennial budget for fiscal years 2014/15 and 2015/16 was distributed to the Board and the public on February 4, 2014; and

WHEREAS, on February 10, 2014, the Chief Financial Officer presented to the Finance and Insurance Committee of Metropolitan's Board the proposed biennial budget for fiscal years 2014/15 and 2015/16, ten-year financial forecast, determination of anticipated total revenues and of revenues anticipated to be derived from water sales and firm revenue sources required during fiscal years 2014/15 and 2015/16, and his recommendation for rates to be effective January 1, 2015 and January 1, 2016, and charges to be imposed in fiscal years 2014/15 and 2015/16; and

WHEREAS, Board workshops and discussions regarding the proposed budget and future water rates and charges were held on February 25, 2014, and at the Finance and Insurance Committee on February 10, March 10, and April 7, 2014; and

WHEREAS, on March 10, 2014, the Chief Financial Officer presented to the Finance and Insurance Committee the biennial budget summary and three separate options for water rates and charges to be established for fiscal years 2014/15 and 2015, the staff recommendation presented on February 10, 2014, and two alternative proposals developed pursuant to suggestions from members of the Board; and

WHEREAS, on March 7, 2014, the capital investment plan appendix to the detailed proposed departmental biennial budget for fiscal years 2014/15 and 2015/16 was distributed to the Board and the public, providing detailed information on proposed capital projects and capital improvement costs, and on March 10, 2014, the Engineering and Operations Committee received a presentation summarizing the proposed biennial Capital Investment Plan budget; and

WHEREAS, the Board conducted a public hearing at its regular meeting on March 11, 2014, at which interested parties were given the opportunity to present their views regarding the proposed water rates and charges; and

WHEREAS, notice of the public hearing was published prior to the hearing in various newspapers of general circulation within Metropolitan's service area; and

WHEREAS, Metropolitan received written comments regarding the proposed water rates and charges, which, together with Metropolitan's responses, have been provided to the Board and the public; and

WHEREAS, on March 27, 2014, the General Manager and Chief Financial Officer provided to the Board and the public a board letter describing the updated recommendations for the biennial budget for fiscal years 2014/15 and 2015/16; determination of total revenues and of revenues to be derived from water sales and firm revenue sources required during fiscal years 2014/15 and 2015/16, and recommended rates to be effective January 1, 2015 and January 1, 2016, and charges to be imposed in fiscal years 2014/15 and 2015/16, and ; and

WHEREAS, the March 27, 2014 board letter also described the two alternative proposals for rates to be effective January 1, 2015 and January 1, 2016, and charges to be imposed in fiscal years 2014/15 and 2015/16 that were suggested by Board members and presented in Board workshops and committee meetings and

WHEREAS, the March 27, 2014 board letter included the biennial budget summary, ten-year financial forecast and detailed reports on the rates and charges and the supporting cost of service that (i) describe the rate structure process and design, (ii) identify revenue requirements; (iii) show the costs of major service functions that Metropolitan provides to its member agencies, (iv) classify these service function costs based on the use of and benefit from the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges, and (v) set forth the specific rates and charges necessary to defray such costs. A separate detailed report was provided for the staff recommendation and each of the two alternative proposals for each of the fiscal years 2014/15 and 2015/16; and

WHEREAS, on April 7, 2014, the Chief Financial Officer presented to the Finance and Insurance Committee of Metropolitan's Board the proposed biennial budget for fiscal years 2014/15 and 2015/16 and ten-year financial forecast, determination of total revenues and of revenues to be derived from water sales and firm revenue sources required during fiscal years 2014/15 and 2015/16, and the staff recommendation and alternative proposals for rates to be effective January 1, 2015 and January 1, 2016, and charges to be imposed in fiscal years 2014/15 and 2015/16, explaining that actual revenues and expenses may vary from budgeted amounts for a variety of reasons, and that Administrative Code Section 5202(e) contemplates variation in actuals to budget and provides policy guidance to the Board, and that Metropolitan's financial obligations may include liabilities and future commitments, such as retiree obligations and debt service, that are not reflected in the budget but that can be addressed in a fiscally prudent manner to reduce future obligations and keep future rate increases reasonable within the policy guidance provided by Administrative Code Section 5202(e); and

WHEREAS, each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout; and

WHEREAS, all board letters, reports, presentations and other documents referred to in this Resolution may be viewed by Board members and the public on Metropolitan's web page at http://www.mwdh2o.com or in the office of the Board Executive Secretary;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California does hereby resolve, determine and order as follows:

Section 1. That the Board of Directors of The Metropolitan Water District of Southern California hereby fixes and adopts the following water rates, to be effective on January 1, 2015 and January 1, 2016 as shown in the table below, in order to enhance Metropolitan's fiscal stability and ability to ensure the region's long-term water supply while reasonably and fairly allocating the cost of providing service to its member agencies and other users of Metropolitan's system:

Table 1. Rates and Charges by Option

		Option 1		Option 2		Option 3	
Effective January 1st	**2014**	**2015**	**2016**	**2015**	**2016**	**2015**	**2016**
Tier 1 Supply Rate ($/AF)	$148	$158	$156	$155	$154	$157	$154
Tier 2 Supply Rate ($/AF)	$290	$290	$290	$290	$290	$290	$290
System Access Rate ($/AF)	$243	$257	$259	$253	$257	$255	$258
Water Stewardship Rate ($/AF)	$41	$41	$41	$41	$41	$41	$41
System Power Rate ($/AF)	$161	$126	$138	$125	$137	$125	$137
Full Service Untreated Volumetric Cost ($/AF)							
Tier 1	$593	$582	$594	$574	$589	$578	$590
Tier 2	$735	$714	$728	$709	$725	$711	$726
Full Service Exchange Cost ($/AF)	$445	$424	$438	$419	$435	$421	$436
Treatment Surcharge ($/AF)	$297	$341	$348	$335	$339	$337	$343
Full Service Treated Volumetric Cost ($/AF)							
Tier 1	$890	$923	$942	$909	$928	$915	$933
Tier 2	$1,032	$1,055	$1,076	$1,044	$1,064	$1,048	$1,069
Readiness-to-Serve Charge ($M)	$166	$158	$153	$155	$148	$157	$150
Capacity Charge ($/cfs)	$8,600	$11,100	$10,900	$10,900	$10,500	$11,000	$10,700

Section 2. The Board finds and determines that the rates specified in Section 1 utilize the unbundled water rate and charge elements of the rate structure approved by Resolution 8774 and implemented by Resolution 8805, and that the cost of service process supporting the rates and charges specified in Section 1 is the cost of service process described in the Cost of Service Report.

Section 3. The Board finds and determines that the cost of service process reasonably, fairly and proportionately: (i) identifies revenue requirements; (iii) shows the costs of major service functions that Metropolitan provides to its member agencies, (iii) allocates costs to the service functions that Metropolitan provides to its member agencies and other users of

Metropolitan's system; (iv) classifies service function costs based upon use of and benefit from Metropolitan's system, and (v) allocates costs to rates and charges based upon customary water industry standards. Accordingly, the Board finds that the cost of service process supports the rates and charges by creating a logical nexus between the costs and the revenues required and the rates and charges necessary to defray Metropolitan's costs of providing its services and for use of its water system.

Section 4. The Board finds and determines that the rates specified in Section 1 are fixed by the Board pursuant to Sections 133 and 134 of the Act, and, so far as practicable, will result in revenue which, together with revenue from water standby or availability service charges or assessments, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt. Actual revenues and expenses may vary from budgeted amounts for a variety of reasons, and Administrative Code Section 5202(e) contemplates variation in actuals to budget and provides policy guidance to the Board, and the Board finds and determines that Metropolitan's financial obligations may include liabilities and future commitments, such as retiree obligations and debt service, that are not reflected in the budget but that can be addressed in a fiscally prudent manner to reduce future obligations and keep future rate increases reasonable within the policy guidance provided by Administrative Code Section 5202(e).

Section 5. The Board finds and determines that the each of the rates specified in Section 1 does not exceed the reasonable and necessary cost of providing the product or service for which the rate is charged and that the per-acre-foot rates fairly apportion such costs among member agencies and other users of Metropolitan's system according to their burden on or benefit from Metropolitan's water system.

Section 6. The Board finds and determines that the respective per-acre-foot rates specified in Section 1 are paid for the corresponding products or services and use of its water system, that Metropolitan provides such products or services directly to the member agencies or other users of Metropolitan's system that pay such rates, and that such products or services are not provided to those not charged.

Section 7. The Board finds and determines that each of the rates specified in Section 1 is imposed for the purpose of paying said cost of service and is not levied for general revenue purposes.

Section 8. The General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

Section 9. This Board finds that approval of the rates and charges as provided in this Resolution is not defined as a Project under the California Environmental Quality Act (CEQA), because they involve continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed actions are not subject to CEQA because they involve the creation of government funding mechanisms or other government fiscal activities, which do not involve any commitment to any specific

project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

Section 10. If any provision of this is held invalid, that invalidity shall not affect other provisions of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 8, 2014.

_____

Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

RESOLUTION ____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA FIXING AND ADOPTING A READINESS-TO-SERVE CHARGEEFFECTIVE JANUARY 1, 2015

WHEREAS, at its meeting on October 16, 2001, the Board of Directors ("Board") of The Metropolitan Water District of Southern California ("Metropolitan") approved a rate structure proposal described in Board Letter 9-6 dated October 16, 2001, including a readiness-to-serve charge; and

WHEREAS, providing firm revenue sources is a goal of such rate structure; and

WHEREAS, the amount of revenue to be raised by the readiness-to-serve charge shall be as determined by the Board and allocation of the readiness-to-serve charge among member public agencies shall be in accordance with the method established by the Board; and

WHEREAS, the readiness-to-serve charge is a charge imposed by Metropolitan upon its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and

WHEREAS, Metropolitan has legal authority to impose such readiness-to-serve charge as a water rate pursuant to Section 134 of the Metropolitan Water District Act (the "Act"), and as an availability of service charge pursuant to Section 134.5 of the Act; and

WHEREAS, under authority of Sections 133 and 134 of the Act, the Board has the authority to fix the rate or rates for water as will result in revenue which, together with other revenues, will pay Metropolitan's operating expenses and provide for payment of other costs, including payment of the interest and principal of Metropolitan's non-tax funded bonded debt; and

WHEREAS, pursuant to Resolution 8329, adopted by the Board on July 9, 1991, as amended and supplemented, proceeds of the readiness-to-serve charge and other revenues from the sale or availability of water are pledged to the payment of Metropolitan's outstanding revenue bonds and revenue bonds to be issued pursuant to Resolution 8329; and

WHEREAS, under authority of Section 134.5 of the Act, a readiness-to-serve charge imposed as an availability of service charge may be collected from the member public agencies within Metropolitan, or may be imposed as a standby charge against individual parcels within Metropolitan's service area; and

WHEREAS, under such authority, the water standby charge may be imposed on each acre of land or each parcel of land less than an acre within Metropolitan to which water is made available for any purpose by Metropolitan, whether the water is actually used or not; and

WHEREAS, certain member public agencies of Metropolitan have opted in prior fiscal years to provide collection of all or a portion of their readiness-to-serve charge obligation through a Metropolitan water standby charge imposed on parcels within those member agencies; and

WHEREAS, Metropolitan is willing to comply with the requests of member public agencies opting to have Metropolitan continue to levy water standby charges within their respective territories, on the terms and subject to the conditions contained herein; and

WHEREAS, on February 10, 2014, the the General Manager presented to the Finance and Insurance Committee of Metropolitan's Board his proposed biennial budget for fiscal years 2014/15 and 2015/16, determination of total revenues and of revenues to be derived from water sales and firm revenue sources required during the fiscal years 2014/15 and 2015/16, and detailed reports for each fiscal year describing each of the proposed rates and charges and the supporting cost of service process, dated April 2014, that (i) describe the rate structure process and design, (ii) identify revenue requirements; (iii) show the costs of major service functions that Metropolitan provides to its member agencies, (iv) classify these service functions costs based on the use of and benefit from the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges, and (v) set forth the rates and charges necessary to defray such costs; and

WHEREAS, the Finance and Insurance Committee of the Board conducted a public hearing on its proposed rates and charges for 2015 and 2016at its regular meeting on March 10, 2014, at which interested parties were given the opportunity to present their views regarding the proposed rates and charges; and

WHEREAS, notice of the public hearing on the proposed rates and charges was published prior to the hearing in various newspapers of general circulation within Metropolitan's service area; and

WHEREAS, based on the feedback received from board workshops held on February 10, 2014, andMarch 10, 2014, and at the February 25, 2014 meeting of the Finance and Insurance Committee,the General Manager presented three alternative recommendations for rates and charges on April 8, 2014;and

WHEREAS, updated cost of service reports, dated April 2014,for the three options included in the General Manager's recommendations for rates and charges were presented to the Board; and

WHEREAS, on April 8, 2014, the Board considered the three alternativerecommendations for rates and charges,approvedthe biennial budget for fiscal years 2014/15 and 2015/16 and adopted recommended water rates and charges for 2015 and 2016; and

WHEREAS, the readiness-to-serve charge applicable to each member public agency, the method of its calculation, and the specific data used in its determination are as specified in the Engineer's Report dated April 2014 (the "Engineer's Report"); and

WHEREAS, the Engineer's Report reflects the range of costs provided in the updated cost of service reports; and

WHEREAS, each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California does hereby resolve, determine and order as follows:

Section 1. That the Board of Directors of Metropolitan hereby fixes and adopts a readiness-to-serve charge for the period from January 1, 2015 through December 31, 2015.

Section 2. That said readiness-to-serve charge shall be in an amount sufficient to provide for payment of debt service and other appropriately allocated costs, for capital expenditures for infrastructure projects needed to provide standby service, and peak conveyance service needs.

Section 3. That such readiness-to-serve charge for January 1, 2015 through and including December 31, 2015 shall be the water rate as specified in Section 5for the rate option selected by the Board, which shall be charged on a historic basis for each acre-foot of water, excluding water used for purposes of replenishing local storage and agriculture as defined by the Administrative Code, included in Metropolitan's average water deliveries to its member agencies for the applicable ten-year period identified in Section 5 below. The aggregate readiness-to-serve charge for the period from January 1, 2015 through and including December 31, 2015 shall be as specified in Section 5for the rate option selected by the Board.

Section 4. That in the alternative, and without duplication, the readiness-to-serve charge shall be an availability of service charge pursuant to Section 134.5 of the Act.

Section 5. That the readiness-to-serve charge for January 1, 2015 through December 31, 2015 shall be allocated among the member public agencies in proportion to the average of deliveries through Metropolitan's system (in acre-feet) to each member public agency during the ten-year period ending June 30, 2013. Metropolitan sales of reclaimed water under the Local Projects Program, groundwater under the Groundwater Recovery Program, and deliveries under the Replenishment and Interim Agricultural Water Service Programs are not included in the readiness-to-serve charge water sales calculation. The allocation of the readiness-to-serve charge among member agencies is based on sales data recorded by Metropolitan and shall be conclusive in the absence of manifest error.

The amount of the readiness-to-serve charge to be imposed on each member public agency effective January 1, 2015, is as follows:

Table 1

Option 1: Calendar Year 2015Readiness-To-Serve Charge

			Water rate $91.14/acre-foot
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2003/04 - FY2012/13	RTS Share	12 months @ $158 million per year (1/15-12/15)
Anaheim	22,572	1.30%	$ 2,057,081
Beverly Hills	11,524	0.66%	1,050,245
Burbank	12,642	0.73%	1,152,126
Calleguas MWD	109,981	6.34%	10,023,254
Central Basin MWD	56,302	3.25%	5,131,143
Compton	2,538	0.15%	231,331
Eastern MWD	97,935	5.65%	8,925,454
Foothill MWD	10,373	0.60%	945,347
Fullerton	10,147	0.59%	924,732
Glendale	20,503	1.18%	1,868,566
Inland Empire Utilities Agency	60,010	3.46%	5,469,040
Las Virgenes MWD	22,797	1.31%	2,077,605
Long Beach	34,315	1.98%	3,127,321
Los Angeles	289,350	16.69%	26,370,304
Municipal Water District of Orange County	222,281	12.82%	20,257,825
Pasadena	21,669	1.25%	1,974,794
San Diego County Water Authority	393,731	22.71%	35,883,186
San Fernando	138	0.01%	12,559
San Marino	1,002	0.06%	91,300
Santa Ana	13,509	0.78%	1,231,150
Santa Monica	11,001	0.63%	1,002,553
Three Valleys MWD	68,167	3.93%	6,212,474
Torrance	18,845	1.09%	1,717,453
Upper San Gabriel Valley MWD	17,081	0.99%	1,556,716
West Basin MWD	131,114	7.56%	11,949,272
Western MWD	74,144	4.28%	6,757,168
MWD Total	1,733,668	100.00%	$ 158,000,000

Totals may not foot due to rounding

Table 1

Option 2: Calendar Year 2015 Readiness-To-Serve Charge

			Water rate $89.41/acre-foot
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2003/04 - FY2012/13	RTS Share	12 months @ $155 million per year (1/15-12/15)
Anaheim	22,572	1.30%	$ 2,018,023
Beverly Hills	11,524	0.66%	1,030,303
Burbank	12,642	0.73%	1,130,250
Calleguas MWD	109,981	6.34%	9,832,939
Central Basin MWD	56,302	3.25%	5,033,716
Compton	2,538	0.15%	226,939
Eastern MWD	97,935	5.65%	8,755,983
Foothill MWD	10,373	0.60%	927,397
Fullerton	10,147	0.59%	907,174
Glendale	20,503	1.18%	1,833,087
Inland Empire Utilities Agency	60,010	3.46%	5,365,197
Las Virgenes MWD	22,797	1.31%	2,038,157
Long Beach	34,315	1.98%	3,067,942
Los Angeles	289,350	16.69%	25,869,602
Municipal Water District of Orange County	222,281	12.82%	19,873,182
Pasadena	21,669	1.25%	1,937,298
San Diego County Water Authority	393,731	22.71%	35,201,860
San Fernando	138	0.01%	12,320
San Marino	1,002	0.06%	89,567
Santa Ana	13,509	0.78%	1,207,774
Santa Monica	11,001	0.63%	983,517
Three Valleys MWD	68,167	3.93%	6,094,516
Torrance	18,845	1.09%	1,684,843
Upper San Gabriel Valley MWD	17,081	0.99%	1,527,158
West Basin MWD	131,114	7.56%	11,722,387
Western MWD	74,144	4.28%	6,628,867
MWD Total	1,733,668	100.00%	$ 155,000,000

Totals may not foot due to rounding

Table 1

Option 3: Calendar Year 2015 Readiness-To-Serve Charge

			Water rate $90.56/acre-foot
Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2003/04 - FY2012/13	RTS Share	12 months @ $157 million per year (1/15-12/15)
Anaheim	22,572	1.30%	$ 2,044,062
Beverly Hills	11,524	0.66%	1,043,598
Burbank	12,642	0.73%	1,144,834
Calleguas MWD	109,981	6.34%	9,959,815
Central Basin MWD	56,302	3.25%	5,098,667
Compton	2,538	0.15%	229,867
Eastern MWD	97,935	5.65%	8,868,964
Foothill MWD	10,373	0.60%	939,364
Fullerton	10,147	0.59%	918,879
Glendale	20,503	1.18%	1,856,740
Inland Empire Utilities Agency	60,010	3.46%	5,434,425
Las Virgenes MWD	22,797	1.31%	2,064,456
Long Beach	34,315	1.98%	3,107,528
Los Angeles	289,350	16.69%	26,203,404
Municipal Water District of Orange County	222,281	12.82%	20,129,611
Pasadena	21,669	1.25%	1,962,296
San Diego County Water Authority	393,731	22.71%	35,656,077
San Fernando	138	0.01%	12,479
San Marino	1,002	0.06%	90,722
Santa Ana	13,509	0.78%	1,223,358
Santa Monica	11,001	0.63%	996,208
Three Valleys MWD	68,167	3.93%	6,173,155
Torrance	18,845	1.09%	1,706,583
Upper San Gabriel Valley MWD	17,081	0.99%	1,546,864
West Basin MWD	131,114	7.56%	11,873,644
Western MWD	74,144	4.28%	6,714,401
MWD Total	1,733,668	100.00%	$ 157,000,000

Totals may not foot due to rounding

Section 6. That the allocation of the readiness-to-serve charge among member agencies set forth in Section 5 above is consistent with the per-acre-foot water rates imposed pursuant to Section 3 above.

Section 7. That water conveyed through Metropolitan's system for the purposes of water transfers, exchanges or other similar arrangements shall be included in the calculation of a member agency's rolling ten-year average firm demands used to allocate the readiness-to-serve charge.

Section 8. That the readiness-to-serve charge and the amount applicable to each member public agency, the method of its calculation, and the specific data used in its determination are as specified in the adopted option based on the General Manager's four alternativeoptionson rates and charges to be effective January 1, 2015, which forms the basis of the readiness-to-serve charge, and the corresponding cost of service report. The adopted option on rates and chargesand cost of service reports are on file and available for review by interested parties at Metropolitan's headquarters.

Section 9. That except as provided in Section 11 below with respect to any readiness-to-serve charge collected by means of a Metropolitan water standby charge, the readiness-to-serve charge shall be due monthly, quarterly or semiannually as agreed upon by Metropolitan and the member agency.

Section 10. That such readiness-to-serve charge may, at the request of any member agency which elected to utilize Metropolitan's standby charge as a mechanism for collecting its readiness-to-serve charge obligation in FY 1996/97, be collected by continuing the Metropolitan water standby charge at the same rates imposed in FY 1996/97 upon land within Metropolitan's (and such member public agency's) service area to which water is made available by Metropolitan for any purpose, whether such water is used or not.

Section 11. That the proposed water standby charge, if continued, shall be collected on the tax rolls, together with the *ad valorem* property taxes which are levied by Metropolitan for the payment of pre-1978 voter-approved indebtedness. Any amounts so collected shall be applied as a credit against the applicable member agency's obligation to pay a readiness-to-serve charge. After such member agency's readiness-to-serve charge allocation is fully satisfied, any additional collections shall be credited to other outstanding obligations of such member agency to Metropolitan or future readiness-to-serve obligations of such agency or, if crediting against other outstanding obligations of a member agency to Metropolitan proves to be impracticable, may be transmitted to the member agency for application solely to the cost of capital infrastructure projects of benefit to properties within the member agency. Notwithstanding the provisions of Section 9 above, any member agency requesting to have all or a portion of its readiness-to-serve charge obligation collected through standby charge levies within its territory as provided herein shall pay any portion not collected through net standby charge collections to Metropolitan within 50 days after Metropolitan issues an invoice for remaining readiness-to-serve charges to such member agency, as provided in Administrative Code Section 4507.

Section 12. That notice is hereby given to the public and to each member public agency of The Metropolitan Water District of Southern California of the intention of Metropolitan's Board to consider and take action at its regular meeting to be held May 13, 2014 (or such other date as the Board shall hold its regular meeting in such month), on the General Manager's recommendation to continue its water standby charge for FY 2014/15 under authority of Section 134.5 of the Act on land within Metropolitan at the same rates, per acre of land, or per parcel of land less than an acre, imposed in FY 1996/97 upon land within Metropolitan's (and such member public agency's) service area. Such water standby charge will be continued as a means of collecting the readiness-to-serve charge.

Section 13. That no failure to collect, and no delay in collecting, any standby charges shall excuse or delay payment of any portion of the readiness-to-serve charge when due. All amounts collected as water standby charges shall be applied solely as credits to the readiness-to-serve charge of the applicable member

agency, with any excess collections being carried forward and credited against other outstanding obligations of such member agency to Metropolitan.

Section 14. That the readiness-to-serve charge is imposed by Metropolitan as a rate or charge on its member agencies, and is not a fee or charge imposed upon real property or upon persons as incidents of property ownership, and the water standby charge is imposed within the respective territories of electing member agencies as a mechanism for collection of the readiness-to-serve charge. In the event that the water standby charge, or any portion thereof, is determined to be an unauthorized or invalid fee, charge or assessment by a final judgment in any proceeding at law or in equity, which judgment is not subject to appeal, or if the collection of the water standby charge shall be permanently enjoined and appeals of such injunction have been declined or exhausted, or if Metropolitan shall determine to rescind or revoke the water standby charge, then no further standby charge shall be collected within any member agency and each member agency which has requested continuation of Metropolitan water standby charges as a means of collecting its readiness-to-serve charge obligation shall pay such readiness-to-serve charge obligation in full, as if continuation of such water standby charges had never been sought.

Section 15. That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

Section 16 That this Board finds that the readiness-to-serve charge and other charges provided in this Resolution are not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

Section 17. That if any provision of this Resolution or the application to any member agency, property or person whatsoever is held invalid, that invalidity shall not affect other provisions or applications of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

Section 18. That the General Manager is hereby authorized and directed to take all necessary action to satisfy relevant statutes requiring notice by mailing or by publication.

Section 19. That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member public agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 8, 2014.

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Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
ENGINEER'S REPORT

PROGRAM TO LEVY READINESS-TO-SERVE CHARGE,

INCLUDING LOCAL OPTION FOR STANDBY CHARGE,
DURING FISCAL YEAR 2014/15

April 2014

BACKGROUND

The Metropolitan Water District of Southern California is a public agency with a primary purpose to provide imported water supply for domestic and municipal uses at wholesale rates to its member public agencies. More than 18 million people reside within Metropolitan's service area, which covers over 5,000 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. Metropolitan currently provides over 50 percent of the water used within its service area.

REPORT PURPOSES

As part of its role as an imported water supplier, Metropolitan builds capital facilities and implements water management programs that ensure reliable high quality water supplies throughout its service area. The purpose of this report is to: (1) identify and describe those facilities and programs that will be financed in part by Metropolitan's readiness-to-serve (RTS) charge , and (2) describe the method and basis for levying Metropolitan's standby charge for those agencies electing to collect a portion of their RTS obligation through Metropolitan's standby charge in fiscal year 2014/15. **Because the standby charge is levied and collected on a fiscal year basis the calculations in this report also are for the fiscal year, even though the RTS charge is imposed on a calendar year basis.** The RTS charge for calendar year 2014was adopted by Metropolitan's Board on April 9, 2013 and the RTS charge for 2015 will be considered by the Board on April 8, 2014.

Metropolitan levies the RTS charge on its member agencies to recover a portion of the debt service on bonds issued to finance capital facilities needed to meet existing demands on Metropolitan's system. The standby charge is levied on parcels of land within certain of Metropolitan's member agencies as a method of collecting part or all of such member agency's RTS charge obligation. The RTS charge will partially pay for the facilities and programs described in this report. The standby charge, if levied, will be utilized solely for capital payments and debt service on the capital facilities identified in this report.

METROPOLITAN'S RESPONSE TO FLUCTUATING WATER DEMANDS

To respond to fluctuating demands for water, Metropolitan and its member agencies collectively examined the available local and imported resource options in order to develop a least-cost plan that meets the reliability and quality needs of the region. The product of this intensive effort was an Integrated Resources Plan (IRP) for achieving a reliable and affordable water supply for Southern California. The major objective of the IRP was to develop a comprehensive water resources plan that ensures (1) reliability, (2) affordability, (3) water quality, (4) diversity of supply, and (5) adaptability for the region, while recognizing the environmental, institutional, and political constraints to resource development. As these constraints change over time, the IRP is periodically revisited and updated by Metropolitan and the member agencies to reflect current conditions. To meet the water supply needs of existing and future customers within its service area, Metropolitan continues to identify and develop additional water supplies to maintain the reliability of the imported water supply and delivery system. These efforts include the construction of capital facilities and implementation of demand management programs.

Capital Facilities

The capital facilities include the State Water Project (SWP), the Colorado River Aqueduct (CRA), storage facilities including Diamond Valley Lake (DVL), and additional conveyance and distribution system components. The benefits of these capital facilities are both local and system-wide, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area.

State Water Project Benefits

In 1960, Metropolitan contracted with the California Department of Water Resources (DWR) to receive SWP supplies. Under this contract, Metropolitan is obligated to pay its portion of the construction and operation and maintenance costs of the SWP system through at least the year 2035, regardless of the quantities of project water Metropolitan takes. Metropolitan is entitled to 1.9 million acre-feet of the total SWP contract amounts of 4.2 million acre-feet. All Metropolitan member agencies benefit from the SWP supplies, which are distributed to existing customers and are available to future customers throughout Metropolitan's service area. The potential benefit of the SWP allocable to the RTS charge in fiscal year 2014/15 is shown in Table 1.

System Storage Benefits

The Metropolitan system, for purposes of meeting demands during times of shortage, regulating system flows, and to ensure system reliability in the event of a system outage, provides over 1,000,000 acre-feet of system storage capacity. DVL provides 800,000 acre-feet of storage capacity for water from the Colorado River Aqueduct and SWP, effectively doubling Southern California's previous surface water storage capacity. Water stored in system storage during above average supply conditions (surplus) provides a reserve against shortages when supply sources are limited or disrupted. System storage also preserves Metropolitan's capability to deliver water during scheduled maintenance periods, when conveyance facilities must be removed from service for rehabilitation, repair, or maintenance. The potential benefit of system storage in fiscal year 2014/15 is shown in Table 1.

Conveyance and Distribution System Benefits

Metropolitan has an ongoing commitment, through physical system improvements and the maintenance and rehabilitation of existing facilities, to maintain the reliable delivery of water throughout the entire service area. System improvement projects include additional conveyance and distribution facilities to maintain the dependable delivery of water supplies, provide alternative system delivery capacity, and enhance system operations. Conveyance and distribution system improvement benefits also include projects to upgrade obsolete facilities or equipment, or to rehabilitate or replace facilities or equipment. These projects are needed to enhance system operations, comply with new regulations, and maintain a reliable distribution system. A list of conveyance and distribution system facilities is provided in Table 3 along with the fiscal year 2014/15 estimated conveyance and distribution system benefits.

Demand Management Program Benefits

Demand management programs that could be financed by the RTS charge and standby charge include Metropolitan's participation in providing financial incentives to local agencies for the construction and development of local resource programs and conservation projects. Investments in demand side management programs like conservation, water recycling and groundwater recovery reduce the need to provide additional imported water supplies and help defer the need for additional conveyance, distribution, and storage facilities. A summary of the estimated benefits of the demand management programs as measured by Metropolitan's anticipated expenditures for these programs in fiscal year 2014/15 is shown in Table 1.

Local Resources Program

In 1982, Metropolitan's Board adopted the Local Resources Program (LRP) with the goal of developing local water resources in a cost-efficient manner. Financial incentives of up to $250 per acre-foot are provided to member agency-sponsored projects that best help the region achieve its local resource production goals of restoring degraded groundwater resources for potable use and developing recycled supplies. In both instances, the programs provide new water supplies, which help defer the need for additional regional conveyance, distribution and storage facilities.

Combined production from participating recycling and groundwater recovery projects produced approximately 233,000 acre-feet of water in fiscal year 2012/13 with financial incentive payments of about $36 million. Regional recycling, recovered groundwater, and desalinated seawater production are projected to be about 400,000 acre-feet per year, by year 2025. An estimate of potential benefits as measured by Metropolitan's estimated incentive payments for recycling and groundwater recovery projects is shown in Table 2.

Water Conservation

Metropolitan actively promotes water conservation programs within its service area as a cost-effective strategy for ensuring the long-term reliability of supplies and as a means of reducing the need to expand system conveyance, distribution and treatment capacity. Through the Conservation Credits Program, Metropolitan reimburses local agencies for a share of their costs of implementing conservation projects. Since fiscal year 1990/91, Metropolitan has spent over $333 million in financial incentives to support local conservation projects.

In 1991, Metropolitan agreed to implement conservation "Best Management Practices" (BMPs). By signing the California Urban Water Conservation Council's *Memorandum of Understanding Regarding Urban Water Conservation* (amended March 10, 2004), Metropolitan committed to implement proven and reliable water conserving technologies and practices within its jurisdiction. Based on Metropolitan's IRP, the Conservation Credits Program, in conjunction with plumbing codes and other conservation efforts, has saved over 1,900,000 acre-feet since inception through fiscal year 2012/13. In order to comply with the Governor's mandate of reducing demand by 20 percent by the year 2020, Metropolitan is working on increasing its conservation efforts in the next ten years to meet that request. Conservation is a critical element of Metropolitan's demand management program, effectively increasing the reliability of existing water supplies by lessening the need to import additional water while at the same time deferring the need to expand system capacity. An estimate of the potential benefits of water conservation projects as measured by Metropolitan's incentive payments is given in Table 2.

LONG-RANGE FINANCIAL PLANNING

Metropolitan's major capital facilities are financed largely from the proceeds of revenue bond issues, which are repaid over future years. The principal source of revenue for repayment of these bonds is water sales, which is currently Metropolitan's largest source of revenue. In addition, *ad valorem* property taxes provide an additional limited revenue source, which is used to pay pre-1978 voter-approved indebtedness.

Since the passage of Article XIIIA of the California Constitution, Metropolitan has necessarily relied more on water sales revenue than on *ad valorem* property taxes for the payment of debt. Water sales have become the dominant source of revenue, not only for operation and maintenance of the vast network of facilities supplying water to Southern California, but also for replacement and improvement of capital facilities.

The increased reliance on highly variable water sales revenue increases the probability of substantial rate swings from year to year mainly resulting from changing weather patterns. The use of water rates as a primary source of revenue has placed an increasing burden on ratepayers, which might more equitably be paid in part by

assessments on land that in part derives its value from the availability of water. In December 1993, Metropolitan's Board approved a revenue structure that included additional charges to establish a commitment to Metropolitan's capital improvement program and provide revenue stability. This revenue structure included the RTS charge.

Readiness-To-Serve Charge

As noted above, Metropolitan levies the RTS charge on its member agencies to recover a portion of the debt service on bonds issued to finance capital facilities needed to meet existing demands on Metropolitan's system. The estimated potential benefits that could be paid by an RTS charge in fiscal year 2014/15exceed $456 million as shown in Table 1.

Although the RTS charge could be set to recover the entire potential benefit amount, the General Manager is recommending that the RTS charge only recover a portion of the total potential benefit. For fiscal year 2014/15, the amount of the total potential benefit to be recovered by the RTS charge is estimated to range from$155,000,000 up to $158,000,000. These funds, when combined with Metropolitan's overall financial resources, will result in greater water rate stability for all users throughout Metropolitan's service area. Consistent with the rate structure approved by the Board in October of 2001, the RTS charge for fiscal year 2014/15 is allocated to each member agency on the basis of a ten-year rolling average of historic water purchases from Metropolitan ending June 30, 2013. This average includes all deliveries used to meet firm demand (consumptive municipal industrial demands), including water transfers and exchanges. The estimated fiscal year 2014/15 RTS for each member agency is shown in Table 4.

Standby Charge Option

Metropolitan's standby charge is authorized by the State Legislature and has been levied by Metropolitan since fiscal year 1992/93. The standby charge recognizes that there are economic benefits to lands that have access to a water supply, whether or not such lands are using it. Utilization of the standby charge transfers some of the burden of maintaining Metropolitan's capital infrastructure from water rates and *ad valorem* taxes to all the benefiting properties within the service area. A fraction of the value of this benefit and of the cost of providing it can be effectively recovered, in part, through the imposition of a standby charge. The projects to be supported in part by a standby charge are capital projects that provide both local and Metropolitan-wide benefit to current landowners as well as existing water users. The estimated potential benefits system-wide are several times the amount to be recovered by means of the standby charge.

Metropolitan will levy standby charges only within the service areas of the member agencies that request that the standby charge be utilized. The standby charge for each acre or parcel of less than an acre will vary from member agency to member agency, as permitted under the legislation establishing Metropolitan's standby charge. The water standby charge for each member agency will be the same as that imposed by Metropolitan in fiscal year 1996/97 and is shown in Table 5.

The proposed standby charge includes the reimposition of water standby charges on: (1) parcels which water standby charges have been imposed in fiscal year 1996/97 and annually thereafter ("pre-1997 standby charges") and (2) parcels annexed to Metropolitan and to an electing member agency after January 1997 ("annexation standby charges"). Only land within member agencies which standby charges were imposed in fiscal year 1996/97 will be subject to the reimposition of pre-1997 standby charges for FY 2014/15. Only land annexed to Metropolitan and to an electing member public agency with respect to which standby charges were approved in accordance with the procedures of Article XIIID, Section 4 of the California Constitution will be subject to the imposition or reimposition, as applicable, of annexation standby charges for fiscal year 2014/15. Table 6 lists parcels annexed, or to be annexed, to Metropolitan and to electing member agencies during FY 2014/15, such parcels being subject to the annexation standby charge upon annexation. Parcels annexed prior to FY 2014/15 are

subject to annexation standby charges as described in the Engineer's Report for the fiscal year of their annexation. These parcels and parcels that are subject to the pre-1997 standby charges are identified in a listing filed with the Executive Secretary.

The estimated potential benefits of Metropolitan's water supply program, which could be paid by a standby charge, exceed $456 million for fiscal year 2014/15, as shown in Table 1. An average total standby charge of about $105.34 per acreof land or per parcel of less than one acre would be necessary to pay for the total potential program benefits. Benefits in this amount will accrue to each acre of property and parcel within Metropolitan, as these properties are eligible to use water from the Metropolitan system. Because only properties located within Metropolitan's boundaries may receive water supplies from Metropolitan (except for certain contractual deliveries as permitted under Section 131 of the Metropolitan Water District Act), any benefit received by the public at large or by properties outside of the proposed area to be annexed is merely incidental.

Table 5 shows that the distribution of standby charge revenues from the various member agencies would provide net revenue flow of approximately $43.6 million for fiscal year 2014/15. This total amount is less than the estimated benefits shown in Table 1. Metropolitan will use other revenue sources, such as water sales revenues, readiness-to-serve charge revenues (except to the extent collected through standby charges, as described above), interest income, and revenue from sales of hydroelectric power, to pay for the remaining program benefits. Thus, the benefits of Metropolitan's investments in water conveyance, storage, distribution, and demand management programs far exceed the recommended standby charge.

Equity

The RTS charge is a firm revenue source. The revenues to be collected through this charge will not vary with sales in the current year. This charge is levied on Metropolitan's member agencies and is not a fee or charge upon real property or upon persons as an incident of property ownership. It ensures that agencies that only occasionally purchase water from Metropolitan but receive the reliability benefits of Metropolitan's system pay a greater share of the costs to provide that reliability. Within member agencies that elect to pay the RTS charge through Metropolitan's standby charges, the standby charge results in lower water rates than would otherwise be necessary due to the amount of revenue collected from lands which benefit from the availability of Metropolitan's water supply. With the standby charge, these properties are now contributing a more appropriate share of the cost of importing water to Southern California.

Metropolitan's water supply program increases the availability and reliable delivery of water throughout Metropolitan's service area. Increased water supplies benefit existing consumers and land uses through direct deliveries to consumers and properties, and through the replenishment of groundwater basins and reservoir storage as reserves against shortages due to droughts, natural emergencies, or scheduled facility shutdowns for maintenance. The benefits of reliable water supplies from the SWP, CRA, DVL, and system improvements accrue to more than 250 cities and communities within Metropolitan's six-county service area. Metropolitan's regional water system is interconnected, so water supplies from the SWP and CRA can be used throughout most of the service area and therefore benefit water users and properties system-wide.

Additional Metropolitan deliveries required in the coming fiscal year due to the demands of property development will be reduced by the implementation of demand management projects, including water conservation, water recycling, and groundwater recovery projects. As with the SWP, CRA and DVL and the conveyance and distribution facilities, demand management programs increase the future reliability of water supplies. In addition, demand management programs provide system-wide benefits by effectively decreasing the demand for imported water, which helps to defer construction of additional system conveyance and distribution capacity. However, the abilities of each member agency to implement these projects under Metropolitan's financial assistance programs vary, depending on local conditions.

A major advantage of a firm revenue source, such as a RTS charge, is that it contributes to revenue stability during times of drought or low water sales. It affords Metropolitan additional security, when borrowing funds, that a portion of the revenue stream will be unaffected by drought or by rainfall. This security will help maintain Metropolitan's historically high credit rating, which results in lower interest expense to Metropolitan, and therefore, lower overall cost to the residents of its service area.

SUMMARY

The foregoing and the attached tables describe the current benefits provided by the projects listed as mainstays to the water supply system for Metropolitan's service area. Benefits are provided to both water users and property owners. The projects represented by this report provide both local benefits as well as benefits throughout the entire service area. It is recommended, for fiscal year 2014/15, that the RTS charge be imposed with an option for local agencies to request that a standby charge be imposed on lands within Metropolitan's service area as a credit against such member agency's RTS, up to the standby charge per acre or parcel of less than one acre levied by Metropolitan within the applicable member agency for fiscal year 2014/15. The maximum standby charge would not exceed $15 per acre of land or per parcel of less than one acre. The benefits described in this Engineer's Report exceed the recommended charge. A listing of all parcels in the service area and the proposed 2014/15 standby charge for each is available in the office of the Chief Financial Officer.

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TABLE 1

ESTIMATED DISTRIBUTION OF BENEFITS OF CONVEYANCE, STORAGE, AND DISTRIBUTION INFRASTRUCTURE, AND DEMAND MANAGEMENT PROGRAMS THAT COULD BE PAID BY RTS CHARGE

Water Conveyance, Storage, Distribution and Demand Management Programs		Estimated Potential Program Benefits for FY2014/15	Dollars Per Parcel of 1 Acre or Less
Net Capital Payments to State Water Project (less portion paid by property taxes)		57,422,198	$13.24
Non Tax Supported Capital Costs for System Storage [1]		139,055,904	$32.05
Non Tax Supported Capital Costs for Conveyance and Distribution System [2]		$198,352,525	$45.72
Sub-Total Capital Payments		**$394,830,627**	**$91.01**
less Estimated Standby Charge Revenues	$	(43,571,129)	($10.04)
Remaining capital payments		$351,259,498	$80.97
Demand Management Programs: Water Recycling, Groundwater Recovery, and Water Conservation Projects		**$62,160,118**	**$14.33**
Sub-Total Capital Financing and Demand Management Programs Costs not Paid by Standby Charge Revenues		$413,419,616	$95.30
Total Benefits: Capital Financing and Demand Management Programs		**$456,990,744**	**$105.34**

Notes:

[1] System storage includes Diamond Valley Lake, Lake Mathews, Lake Skinner and several other smaller surface reservoirs which provide storage for operational purposes.

[2] Conveyance and Distribution facilities include the Colorado River Aqueduct and the pipelines, laterals, feeders and canals that distribute water throughout the service area.

Totals may not foot due to rounding

TABLE 2

WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS

Project Name	FY 2014/15 Payment
Water Recycling Projects	**$30,407,333**
Advanced Water Purification Facility Prooject	
Alamitos Barrier Reclaimed Water Project	
Burbank Reclaimed Water System Expansion Project	
Burbank Reclaimed Water System Expansion Project - Phase 2	
Calabasas Reclaimed Water System Expansion	
Capistrano Valley Non-Domestic Water System Expansion	
Century/Rio Hondo Reclamation Program	
City of Industry Regional Water System - Rowland	
City of Industry Regional Water System - Suburban	
City of Industry Regional Water System - Walnut	
Decker Canyon WRP	
Development of Non-Domestic Water Sys. Exp. Ladera	
Direct Reuse Project Phase IIA	
Dry Weather Runoff Reclamation Facility	
Eastern Recycled Water Pipeline Reach 16	
Eastern Regional Reclaimed Water System	
EMWD Reach I Phase II	
Eastern Recycled Water System Expansion Project	
EVMWD Recycled Water Program	
Encina Basin Water Rec. Prog - Phases I and II	
Escondido Regional Reclaimed Water Project	
Fallbrook Reclamation Project	
Glendale Verdugo-Scholl Canyon Recl. Water Project	
Glendale Water Reclamation Expansion Project	
Green Acres Reclamation Project - Coastal	
Green Acres Reclamation Project - MWDOC	
Green Acres Reclamation Project - Santa Ana	
Groundwater Replenishment System Talbert Seawater Intrusion Barrier Component	
Hansen Area Water Recycling Project Phase 1	
Harbor Refineries Recycled Water Project	
Harbor Water Recycling Project	
IEUA Regional Recycled Water Dist. System	
IEUA Regional Recycled Water Dist. System Expansion	
IRWD Recycled Water System Upgrade	
Lakewood Water Reclamation Project	

TABLE 2 (Continued)

WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS

Project Name	FY 2014/15 Payment
Water Recycling Projects (continued)	
Long Beach Reclamation Expansion Phase I	
Los Angeles Taylor Yard Water Recycling Project	
Moulton Niguel Phase 4 Reclamation System Expansion	
Moulton Niguel Reclamation Project	
North City Water Reclamation Project	
Oceanside Water Reclamation Project	
Olivenhain Recycled Project - SE Quadrant	
Otay Recycled Water System	
Padre Dam Reclaimed Water System Phase I	
Ramona/Santa Maria Water Reclamation Project	
Rancho California Reclamation Expansion	
San Clemente Water Reclamation Project	
San Elijo Water Reclamation System	
Sepulveda Basin Water Reclamation Project	
Sepulveda Basin Water Recycling Project Phase IV	
Trabuco Canyon Reclamation Expansion Project	
Van Nuys Area Water Recycling Project	
West Basin Water Reclamation Program	

TABLE 2 (Continued)

WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS

Project Name	FY 2014/15 Payment
Groundwater Recovery Projects	**$8,828,871**
Beverly Hills Desalter	
Burbank Lake Street GAC Plant	
Capistrano Beach Desalter	
Chino Basin Desalination Program - IEUA	
Chino Basin Desalination Program - Western	
Irvine Desalter	
Juan Well Filter Facility	
Lower Sweetwater Desalter Phase 1	
Madrona Desalter (Goldsworthy)	
Menifee Basin Desalter	
Mesa Consolidated Colored Water Treatment Facility	
Oceanside Desalter Phase I	
Oceanside Desalter Phase I and II	
Pomona Well # 37	
San Juan Desalter	
Tapo Canyon Water Treatment Plant	
Temescal Basin Desalting Facility	
Tustin Desalter	
Additonal Supplies for core resources	**$2,923,914**
Conservation Projects	**$20,000,000**
Regionwide Residential	
Regionwide Commercial	
Member Agency Administered/MWD Funded	
Water Incentive Savings Program	
Grants Programs - High Efficiency Clothes Washers	
Total Demand Management Programs	**$62,160,118**

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Storage Facilites

GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER
102677 - JENSEN, REPAIR COVER OVER RESERVOIR 1
ALAMEDA CORRIDOR, PIPELINE RELOCATION, PROTECTION
CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN $250,000-LIVE OAK
CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN $250,000-MORRIS DAM
CHINO BASIN GROUNDWATER SERVICE CONNECTION CB-15T
CHLORINATION AND PH CONTROL FACILITIES- ORANGE COUNTY & GARVEY (50/50)
CLEARING OF LAKE MATHEWS RESERVOIR AREA
CONVERSION OF DEFORMATION SURVEY MONITORING AT COPPER BASIN
COPPER BASIN AND GENE WASH DAM, INSTALL SEEPAGE ALARM (50/50)
COPPER BASIN RESERVOIR SUPERVISORY CONTROL
COPPER BASIN SEWER SYSTEM
CORONA DEL MAR RESERVOIR- REPLENISHMENT
CORONA DEL MAR RESERVOIR-: CHLORINATION STATION
CRANE - LAKE MATHEWS OUTLET TOWER (ORG CONST)
DIAMOND VALLEY LAKE, CAL PLAZA CHARGES
DIAMOND VALLEY LAKE, CONSULTANT COSTS
DIAMOND VALLEY LAKE, DAM DEFORMATION MONITORING
DIAMOND VALLEY LAKE, EAST DAM SUMP PUMP ELECTRICAL STUDY
DIAMOND VALLEY LAKE, GENERAL CONSTRUCTION MGMT, 2000-2001
DIAMOND VALLEY LAKE, INUNDATION MAPS
DIAMOND VALLEY LAKE, UNDERGROUND TANK CLOSURE
DIAMOND VALLEY RECREATION, EAST MARINA
DIAMOND VALLEY RECREATION, FISHERY
DIAMOND VALLEY RECREATION, MUSEUM FOUNDATION REHABILITATION
DIAMOND VALLEY RECREATION, SEARL PARKWAY IMPROVEMENTS, PHASE I
DIAMOND VALLEY TRAILS PROGRAM, TRAILS
DISTRICT DESIGN AND INSPECTION - MORRIS DAM
DISTRICT RESERV. AQUEOUS AMMONIA FEED SYSTEM
DISTRICT RESERVOIR - LONGTERM CHEMICAL FAC CONTAINMENT
DOMESTIC WATER SUPPLY - LAKE MATHEWS (ORG CONST)
DOMESTIC WATER SYSTEM - LAKE MATHEWS (ORG CONST)
DOMESTIC WATER SYSTEM-PALOS VERDES RESERVOIR (INTERIM CONST)
DVL - SEARL PARKWAY EXTENSION - PHASE 2
DVL - SEARL PARKWAY LANDSCAPING
DVL RECREATION - ALTERNATE ACCESS ROAD
DVL RECREATION, COMMUNITY PARK AND REGIONAL AQUATIC FACILITY
DVL SECURITY ENHANCEMENT
DVL, CONSTRUCTION
DVL, CONSTRUCTION CLAIMS SUPPORT
DVL, CONSTRUCTION MANAGEMENT SERVICE
DVL, CONSTRUCTION SUPERVISION
DVL, CONSTRUCTION, WEST DAM FOUNDATION
DVL, DEDICATION CEREMONY
DVL, DISTURBED
DVL, DOMENIGONI PARK
DVL, EAST DAM
DVL, EAST DAM EMBANKMENT
DVL, EAST DAM FENCING
DVL, EAST DAM INLET OUTLET TOWER CONSTRUCTION
DVL, EAST DAM LANDSCAPE SCREENING
DVL, EAST DAM NORTH RIM REMEDIATION
DVL, EAST DAM P-1 FACILITIES
DVL, EAST DAM SITE COMPLETION
DVL, EAST DAM STATE STREET IMPROVEMENTS
DVL, EAST DAM VERTICAL SLEEVE VALVE
DVL, EAST MARINA, PHASE 2
DVL, EXCAVATION
DVL, FIXED CONE, SPHERE
DVL, GENERAL
DVL, GRADING OF CONT
DVL, INSTALL NEW WATERLINE
DVL, MISC SMALL CONS
DVL, NORTH HIGH WATER ROAD
DVL, P-1 PUMPING FACILITY
DVL, PROCUREMENT
DVL, SCOTT ROAD EXTENSION
DVL, SOUTH HIGH WATER ROAD & QUARRY
DVL, SPILLWAY
DVL, START UP
DVL, VALLEY-WIDE SITE ROUGH GRADING
DVL, WORK PACKAGE
DVL, WORK PACKAGE 1
DVL, WORK PACKAGE 10, INLET OUTLET WORK
DVL, WORK PACKAGE 11, FOREBAY
DVL, WORK PACKAGE 12, TUNNEL
DVL, WORK PACKAGE 13, P-1 PUMP OPERATIONS FACILITY
DVL, WORK PACKAGE 14, PC-1
DVL, WORK PACKAGE 15, SITE CLEARING
DVL, WORK PACKAGE 16, GROUNDWATER MONITORING
DVL, WORK PACKAGE 17, FIELD OFFICE
DVL, WORK PACKAGE 18, TEMPORARY VISITOR CENTER
DVL, WORK PACKAGE 19, PERMANENT VISITOR CENTER
DVL, WORK PACKAGE 2, EASTSIDE PIPELINE
DVL, WORK PACKAGE 20, EAST DAM EXCAVATION, FOUNDATION
DVL, WORK PACKAGE 21, WEST DAM EXCAVATION, FOUNDATION
DVL, WORK PACKAGE 23, WEST RECREATION AREA
DVL, WORK PACKAGE 24, EAST RECREATION AREA
DVL, WORK PACKAGE 25, EXCAVATION
DVL, WORK PACKAGE 26, ELECTRICAL TRANSMISSION LINES
DVL, WORK PACKAGE 27, MAJOR EQUIPMENT P-1
DVL, WORK PACKAGE 28, MAJOR EQUIPMENT, GATES
DVL, WORK PACKAGE 29, MAJOR EQUIPMENT, PC-1
DVL, WORK PACKAGE 30, INSTRUMENTATION AND CONTROL SYSTEMS
DVL, WORK PACKAGE 31, GEOGRAPHICAL INFO
DVL, WORK PACKAGE 32, PERMIT
DVL, WORK PACKAGE 33, MAJOR EQUIPMENT, VALVES

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Storage Facilites

DVL, WORK PACKAGE 34, EMERGENCY RELEASE
DVL, WORK PACKAGE 35
DVL, WORK PACKAGE 36, TRANSMISSION LINE TO PC-1
DVL, WORK PACKAGE 38, RUNOFF EROSION
DVL, WORK PACKAGE 39, SADDLE DAM FOUNDATION
DVL, WORK PACKAGE 4, NEWPORT ROAD RELOCATION
DVL, WORK PACKAGE 40
DVL, WORK PACKAGE 42, GEOTECHNICAL
DVL, WORK PACKAGE 43, MOBILIZATION
DVL, WORK PACKAGE 44, SITE DEVELOPMENT
DVL, WORK PACKAGE 47, HAZARDOUS MATERIAL
DVL, WORK PACKAGE 48, GENERAL ADMIN
DVL, WORK PACKAGE 49
DVL, WORK PACKAGE 5, SALT CREEK FLOOD CONTROL
DVL, WORK PACKAGE 52, HISTORY ARCHEOLOGY INVENTORY
DVL, WORK PACKAGE 53, PREHISTORIC ARCHEOLOGY
DVL, WORK PACKAGE 54, PLANTS, WILDLIFE
DVL, WORK PACKAGE 55, AIR QUALITY, NOISE
DVL, WORK PACKAGE 6, SURFACE WATER MITIGATION
DVL, WORK PACKAGE 7, DESIGN WEST DAM ACCESS
DVL, WORK PACKAGE 8, DESIGN EAST DAM ACCESS
DVL, WORK PACKAGE 9, SADDLE DAM
DVL, WORKING INVENTORY, 80,000 ACRE FEET (10% OF CAPACITY)
EAST DAM TUNNELS
EAST MARINA BOAT RAMP EXTENSION
ELECTRICAL SERVICE - LAKE MATHEWS (ORG CONST)
ELECTRICAL SYSTEM - LAKE MATHEWS (ORG CONST)
FIRST SAN DIEGO AQUEDUCT - REPLACE PIPELINE SECTION BOTH BARRELS
FLOATING BOAT HOUSE - LAKE MATHEW
FLOOD RELEASE VALVE, MORRIS DAM & WATER SUPPLY SYSTEM,PV RESER.
FOOTBRIDGE - LAKE MATHEWS (ORG CONST)
FOOTHILL FEEDER- LIVE OAK RESERVOIR- CLAIMS
FOOTHILL FEEDER- LIVE OAK RESERVOIR- RESIDENCE
GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER
GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER (RETIREMENT)
GARVEY RESERVOIR - JUNCTION STRUCTURE,REPLACE VALVE # 1
GARVEY RESERVOIR- EMERGENCY GENERATOR
GARVEY RESERVOIR- FLOATING COVER
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1 - INTEREST
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVES # 4 & 5
GARVEY RESERVOIR- MODIFY DESILTING BASINS
GARVEY RESERVOIR REPAIR
GARVEY RESERVOIR, LOWER ACCESS ROAD, PAVING & DRAINS
GARVEY RESERVOIR, REPLACE VALVE # 4 & 5
GARVEY RESERVOIR, TWO VALVES AT JUNCTION STRUCTURE
GARVEY RESERVOIR: CONT. 565, SPEC.412
GARVEY RESERVOIR: TWO COTTAGES WITH GARAGES
GARVEY RESERVOIR-HYPOCHLORINATION
GARVEY RESERVOIR-HYPOCHLORINE STATION
GARVEY RESERVOIR-INLET AND OUTLET CONDUIT SYSTEM MODIFICATION
GARVEY RESEVOIR-JUNCTION STRUCTURE REPLACE TWO VALVES
GARVEY RSVR REPLACE VENTURI THROAT SECTION
GARVEY RSVR-=REPLACE CENETRUI THROAT SECTION
HEADWORKS OF DISTRIBUTION SYSTEM LAKE MATHEWS
HEADWORKS: ADDITIONAL VALVES
HEADWORKS: MOTOR OPERATED SLIDE GATES
HOUSE AND GARAGE AT CORONA DEL MAR RESERVOIR
HOUSE AND GARAGE AT ORANGE COUNTY RESERVOIR
HOUSE AT PALOS VERDES RESERVOIR
HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1939
HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1955
IOC - DIAMOND VALLEY LAKE
IOC - DIEMER, RESERVOIR SEISMIC UPGRADES
IOC - GARVEY RESERVOIR REPAIR
IOC - GARVEY RESERVOIR, HYPOCHLORINATION SYSTEM
IOC - LAKE MATHEWS OUTLET FACILITIES
IOC - LAKE MATHEWS WATERSHED
IOC - LAKE SKINNER BYPASS PIPELINE #2 AND #3
IOC - ORANGE COUNTY RSVR, REPLACE CHLORINATION SYSTEM
IOC - PALOS VERDES RSVR, REPLACE CHLORINATION SYSTEM
LAKE MATHEWS - REPLACE STANDBY GENERATOR
LAKE MATHEWS - ELECTRICAL SYSTEM IMPROVEMENT
LAKE MATHEWS BUILDING
LAKE MATHEWS BUILDINGS 8 & 15, RENOVATION OF ASSEMBLY AREA AND ADMIN. BLDG.
LAKE MATHEWS- CARPENTER AND VEHICLE MAINTENANCE BUILDING
LAKE MATHEWS- CHLORINATION FACILITIES
LAKE MATHEWS CHLORINATION FACILITY- REPLACE CHLORINATION EQPMT.
LAKE MATHEWS CNTRL TOWER-REPL. 45 30-INCH GATE/BUTTERFLY VALVES
LAKE MATHEWS CONTROL TOWER - REPLACE 45 10-INCH GATE VALVE
LAKE MATHEWS DIKE
LAKE MATHEWS DIVERSION TUNNEL
LAKE MATHEWS DIVERSION TUNNEL WALKWAY REPAIR
LAKE MATHEWS- DOCK AND BOAT SHELTER
LAKE MATHEWS DOMESTIC FACILITIES
LAKE MATHEWS- DOMESTIC WATER SYSTEM
LAKE MATHEWS- ELECTRICAL SYSTEM IMPROVEMENT
LAKE MATHEWS- EMERGENCY GENERATOR
LAKE MATHEWS ENLARGEMENT (SPEC NO. 505)
LAKE MATHEWS FOREBAY OUTLET STRCTR-REPL.CONCRETE BLOCK BLDG
LAKE MATHEWS FOREBAY OUTLET, CONCRETE BLDG
LAKE MATHEWS FOREBAY- REPLACE FOOTBRIDGE
LAKE MATHEWS HEADWORKS-INSTALL AIR MTRS,3 HOWELL BNGR VALVE OP.
LAKE MATHEWS- HOUSE AND GARAGE
LAKE MATHEWS- IMPROVE MAIN SUBSTATION
LAKE MATHEWS- IMPROVEMENT OF DOMESTIC WATER & FIRE PROT. SYSTEM
LAKE MATHEWS -LUMBER STORAGE BUILDING

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Storage Facilites

LAKE MATHEWS -LUMBER STORAGE BUILDING - INTEREST
LAKE MATHEWS LUMBER STORAGE ROOF COVER
LAKE MATHEWS MAIN DAM AND SPILLWAY
LAKE MATHEWS MAIN DAM SUB DRAIN SYSTEM
LAKE MATHEWS MAINTENANCE BUILDING
LAKE MATHEWS MAINTN.FACILITIES-REPLACE 75 KVA TRANSFORMER.SERV.
LAKE MATHEWS- MODIFY CHLORINATION
LAKE MATHEWS- MODIFY CHLORINE STORAGE TANK FOUNDATIONS
LAKE MATHEWS- MODIFY ELECTRICAL SERVICE
LAKE MATHEWS MULTIPLE SPECIES RESERVE, MANAGER"S OFFICE AND RESIDENCE
LAKE MATHEWS OFFICE BLDG MODIFICATIONS-AMERICANS W/ DISABILITY
LAKE MATHEWS OFFICE TRAILER MODIFICATIONS-AMERICANS W/ DISABILITY
LAKE MATHEWS -OPERATOR RESIDENCE
LAKE MATHEWS OULET TOWER
LAKE MATHEWS OUTLET FACILITIES
LAKE MATHEWS OUTLET TOWER- REPLACE CRANES
LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES
LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES (RETIREMENT)
LAKE MATHEWS OUTLET TUNNEL
LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER
LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER - INTEREST
LAKE MATHEWS- PROPANE STORAGE TANK
LAKE MATHEWS- PROPANE STORAGE TANK - INTEREST
LAKE MATHEWS- REPLACE HOWELL-BUNGER VALVE OPERATORS
LAKE MATHEWS- REPLACE VALVES
LAKE MATHEWS RESERVOIR - RELOCATE SOUTHERLY SECURITY FENCE
LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE
LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE - INTEREST
LAKE MATHEWS- SEEPAGE ALARMS
LAKE MATHEWS- SEEPAGE ALARMS - INTEREST
LAKE MATHEWS- SPRAY PAINT BOOTH
LAKE MATHEWS WATERSHED, DRAINAGE
LAKE MATHEWS, HAZEL ROAD
LAKE MATHEWS, REPLACE CHLORINATION EQUIPMENT
LAKE MATHEWS,DIKE #1- INSTALL PIEZOMETERS, STAS.55+00 & 85+50
LAKE MATHEWS: VALVES AND FITTINGS IN HEADWORKS
LAKE MATHEWS-CONST. CONCR.TRAFFIC BARR. WALL TO PROTECT HQ FACIL.
LAKE MATTHEWS FIRE WATER LINE
LAKE PERRIS POLLUTION PREVENTION AND SOURCE WATER PROTECTION (CAPITAL PORTION)
LAKE SKINNER - AERATION SYSTEM
LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN
LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN - INTEREST
LAKE SKINNER - INSTALL OUTLET CONDUIT FLOWMETER
LAKE SKINNER (AULD VALLEY RESERVOIR)- CLAIMS
LAKE SKINNER AERATOR AIR COMPRESSORS REPLACEMENT
LAKE SKINNER- EQUIPMENT YARD SECURITY
LAKE SKINNER- EQUIPMENT YARD SECURITY - INTEREST
LAKE SKINNER FACILITIES
LAKE SKINNER FACILITIES - EMPLOYEE HOUSING
LAKE SKINNER FACILITIES - FENCING
LAKE SKINNER FACILITIES - LANDSCAPING
LAKE SKINNER FACILITIES - RELOCATE BENTON ROAD
LAKE SKINNER OUTLET CONDUIT REPAIR
LAKE SKINNER- PROPANE STORAGE TANK
LAKE SKINNER- PROPANE STORAGE TANK - INTEREST
LIVE OAK RESERVOIR & RESERVOIR BYPASS SCHEDULE 264A
LIVE OAK RESERVOIR SURFACE REPAIR
MAINTENANCE FACILITIES, 75KVA TRANSFORMER SERVICE-LAKE MATHEWS (ORG CONST)
MINOR CAPITAL PROJECTS FOR FY 1989/90 - LAKE MATHEWS
MINOR CAPITAL PROJECTS FOR FY 1989/90 - PALOS VERDES RESERVOIR
MINOR CAPITAL PROJECTS-LAKE SKINNER, INLET CANAL ELECTRIC FISH BARRIER
MINOR CAPITAL PROJECTS-LIVE OAK RESERVOIR, DESILT BASIN IMPROVEMENTS
MODIFICATION OF THE LAKE MATHEWS SERVICE WATER SYSTEM
MORRIS DAM COTTAGE
MORRIS DAM- ENLARGMT. OF SPILLWAY FACLT.& UPPER FDR.VALVE MODF
MORRIS DAM ROAD IMPROVEMENT
MORRIS DAM, SEISMIC STABILITY REANALYSIS
MORRIS DAM-REPLACE EMERGENGY POWER SYSTEM
MORRIS RESERVOIR- CAPITAL OBLIGATION PAID
MORRIS RESERVOIR- INTEREST OBLIGATION PAID
O.C.RESERVOIR - IMPROVE DOMESTIC SYSTEM
ORANGE COUNTY RESERVOIR -- JUNCTION STRUCTURE,REPLACE VALVE # 1
ORANGE COUNTY RESERVOIR (SPEC NO. 341)
ORANGE COUNTY RESERVOIR CHLORINATION STATION
ORANGE COUNTY RESERVOIR- EMBANKMENT AND SPILLWAY
ORANGE COUNTY RESERVOIR- EMERGENCY GENERATOR
ORANGE COUNTY RESERVOIR- FLOATING COVER
ORANGE COUNTY RESERVOIR- HOUSE
ORANGE COUNTY RESERVOIR- MODIFY DOMESTIC WATER SYSTEM
ORANGE COUNTY RESERVOIR- REPLACE RESIDENCE NO. 95D
ORANGE COUNTY RESERVOIR-MODIFY ELEC. CONTROL CENTER
ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION EQUIPMENT
ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION SYSTEM
P V RESERVOIR-REPLACE CHLORINATION SYSTEM
PALOS VERDES CHLORINATION STATION AND COTTAGE
PALOS VERDES RESERVOIR
PALOS VERDES RESERVOIR - INLET/OUTLET TOWER
PALOS VERDES RESERVOIR- BY PASS PIPELINES
PALOS VERDES RESERVOIR- FENCING AROUND
PALOS VERDES RESERVOIR- REPLACE DOMESTIC WATER SYSTEM PIPING
PALOS VERDES RESERVOIR,BYPASS PIPELINE RELIEF STRUCTURE MODIFN.
PALOS VERDES RESERVOIR,COVERING
PALOS VERDES RESERVOIR,REPLACE ACCESS AND PERIMETER ROADS
PALOS VERDES RESERVOIR: INCREASING ELEVATION OF SPILLWAY CREST
PALOS VERDES RESERVOIR-INSTALL VALVE & CHLORINATION NOZZLE,INL.TWR
PALOS VERDES RESERVOIR-REPLACE CHLORINATION SYSTEM
PAMO RESERVOIR- WATER STORAGE FEASIBIILITY STUDY

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description	
Storage Facilites	
PAMO RESERVOIR- WATER STORAGE FEASIBIILITY STUDY- INTEREST	
RECORD DRAWING RESTORATION PROGRAM, CRA	
REPAIRS TO AZUSA CONDUIT	
REPLACE 32	
REPLACEMENT OF A 30 INCH GATE VALVE P.V.R.	
RESIDENCE # 95-D, ORANGE COUNTY RESERVOIR	
RESIDENCE 45-D - CORONA DEL MAR RESERVOIR	
RESIDENCE 80-D - ORANGE COUNTY RESERVOIR	
RESIDENCE 90-D - LAKE MATHEW	
RESIDENCE 91-D - SAN JACINTO RESERVOIR	
RESIDENCE 93-D - SAN JACINTO RESERVOIR	
ROADS AT LAKE MATHEWS ABOVE FLOODLINE	
SAN DIEGO ACQUEDUCT: COTTAGE AT SAN JACINTO RESERVOIR	
SAN JACINTO RESERVOIR - SAN DIEGO AQUEDUCT	
SECOND OUTLET, PALOS VERDES RESERVOIR (SPEC NO. 597)	
SEEPAGE CONTROL AT LAKE MATHEWS	
TEMPORARY EMPLOYEE LABOR SETTLEMENT	
VALVE - GENE RESERVOIR (REPLACED 201)	
VALVE STRUCTURE MODIFICATIONS-UPPER FDR, SAN GABRIEL CROSSING (INTERIM CONST)	
VALVE, TWO 36	
WADSWORTH PUMP PLANT CONDUIT PROTECTION	
WADSWORTH PUMP PLANT, PUMP MOTOR CONVERSION	
WATER QUALITY PROJECT UPSTREAM	
WATER SUPPLY SYSTEM, OPERATING TOWER, LAKE MATHEWS	
Sub-total Storage facilities benefits	***139,055,904***

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Conveyance and Aqueduct Facilites

ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT
ALL PUMPING PLANTS - 230 KV & 69 KV DISCONNECTS REPLACEMENT
ALL PUMPING PLANTS - BRIDGE CRANES
ALL PUMPING PLANTS - TRANSFORMER BANK BRIDGE
ALLEN MCCOLLOCH PIPELINE - CORROSION INTERFERENCE MITIGATION
ALLEN MCCOLLOCH PIPELINE - RIGHT OF WAY
ALLEN MCCOLLOCH PIPELINE - UPDATE / MODIFY ALL BOYLE ENGINEERING DRAWINGS
AMP VALVE & SERVICE CONNECTION VAULT REPAIR
AQUEDUCT & PUMPING PLANT ISOLATION / ACCESS FIXTURES - STUDY
AQUEDUCT & PUMPING PLANT ISOLATION GATES
ARROWHEAD EAST TUNNEL CONSTRUCTION
ARROWHEAD TDS REDUCTION
ARROWHEAD TUNNELS CLAIMS COST
ARROWHEAD TUNNELS CONNECTOR ROAD
ARROWHEAD TUNNELS CONSTRUCTION
ARROWHEAD TUNNELS ENGINEERING
ARROWHEAD TUNNELS RE-DESIGN
ARROWHEAD WEST TUNNEL CONSTRUCTION
AULD VALLEY CONTROL STRUCTURE AREA FACILITIES UPGRADE STUDY
AUXILIARY POWER SYSTEM REHABILITATION / UPGRADES STUDY
BACHELOR MOUNTAIN COMMUNICATION SITE ACQUISITION
BACHELOR MOUNTAIN TELECOM SITE IMPROVEMENTS
BANK TRANSFORMERS REPLACEMENT STUDY
BLACK METAL MOUNTAIN - COMMUNICATIONS FACILITY UPGRADE
BOX SPRINGS FEEDER REHAB PHASE III
BUDGET ADJUSTMENT
CABAZON RADIAL GATE FACILITY IMPROVEMENTS
CAJALCO CREEK MITIGATION FLOWS
CAST-IRON BLOW OFF REPLACEMENT - PHASE 4
CATHODIC PROTECTION STUDY - DESIGN AND CONSTRUCTION
CCRP - BLOW-OFF VALVES PHASE 4 PROJECT
CCRP - CONTINGENCY
CCRP - EMERGENCY REPAIR
CCRP - HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB.
CCRP - PART 1 & 2
CCRP - SAND TRAP CLEANING EQUIPMENT & TRAVELING CRANE STUDY
CCRP - TRANSITION & MAN-WAY ACCESS COVER REPLACEMENT - STUDY & DESIGN
CCRP - TUNNELS STUDY
CEPSRP - 230 KV SYSTEM SYNCHRONIZERS
CEPSRP - ALL PUMPING PLANTS - CONTINGENCY & OTHER CREDITS
CEPSRP - ALL PUMPING PLANTS - REPLACE 6.9 KV TRANSFORMER BUSHINGS
CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV , 69 KV & 6.9 KV LIGHTENING ARRESTERS
CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV TRANSFORMER PROTECTION
CEPSRP - SWITCHYARDS & HEAD GATES REHABILITATION
CEPSRP- ALL PUMPING PLANTS - IRON MOUNTAIN - 230KV BREAKER SWITCH. INST.
COLORADO RIVER AQUEDUCT - PUMPING
COLORADO RIVER AQUEDUCT - SIPHONS AND RESERVOIR OUTLETS REFURBISHMENT
COLORADO RIVER AQUEDUCT CONVEYANCE RELIABILITY, PHASE II REPAIRS AND INSTRUMENTATION
CONTROL SYSTEM DRAWING UPGRADE STUDY (PHASE 1) - STUDY
COPPER BASIN AND GENE DAM OUTLET WORKS REHABILITATION (STUDY & DESIGN)
COPPER BASIN INTERIM CHLORINATION SYSTEM
COPPER BASIN OUTLET GATES RELIABILITY
COPPER BASIN OUTLET REHABILITATION
COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH DAM SLUICEWAYS REHABILITATION
COPPER BASIN POWER & PHONE LINES REPLACEMENT
COPPER SULFATE STORAGE AT LAKE SKINNER AND LAKE MATHEWS
CORROSION CONTROL OZONE MATERIAL TEST FACILITY
COST OF LAND AND RIGHT OF WAY
CRA - ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT
CRA - AQUEDUCT AND PUMPING PLANT ISOLATION GATES
CRA - AQUEDUCT RESERVOIR AND DISCHARGE LINE ISOLATION GATES
CRA - AUXILIARY POWER SYSTEM REHAB
CRA - BANK TRANSFORMERS REPLACEMENT STUDY
CRA - BLOW-OFF VALVES PHASE 4
CRA - CIRCULATING WATER SYSTEM STRAINER REPLACEMENT
CRA - CONTROL SYSTEM IMPLEMENTATION PHASE CLOSE OUT
CRA - CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2
CRA - COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH SLUICEWAYS REHABILITATION
CRA - COPPER BASIN POWER & PHONE LINES REPLACEMENT
CRA - CUT & COVER FORNAT WASH EXPOSURE STUDY
CRA - CUT AND COVER FORNAT WASH EXPOSURE STUDY
CRA - DANBYTOWER FOOTER REPLACEMENT
CRA - DELIVERY LINE NO. 1 SUPPORTS REHAB - FIVE PUMPING PLANTS
CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - GENE & INTAKE
CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - IRON, EAGLE, & HINDS
CRA - DESERT PUMP PLANT OIL CONTAINMENT
CRA - DESERT SEWER SYSTEM REHABILITATION
CRA - DESERT SEWER SYSTEM REHABILITATION PROJECT
CRA - DESERT WATER TANK ACCESS & SAFETY IMPROVEMENTS
CRA - DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION
CRA - DISCHARGE LINE ISOLATION GATES
CRA - DWCV-4 VALVE REPLACEMENT
CRA - EAGLE MOUNTAIN SAND TRAPS INFLOW STUDY
CRA - ELECTRICAL/ POWER SYST REL. PROG. - IRON MTN - 230KV BREAKER SWITC. INST.
CRA - GENE PUMPING PLANT MAIN TRANSFORMER AREA
CRA - HINDS PUMP UNIT NO. 8 REFURBISHMENT
CRA - INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU
CRA - INTAKE PUMPING PLANT AUTOMATION PROGRAMMING
CRA - INVESTIGATION OF SIPHONS AND RESERVOIR OUTLETS
CRA - IRON MTN. TUNNEL REHABILITATION
CRA - LAKEVIEW SIPHON FIRST BARREL - REPAIR DETERIORATED JOINTS
CRA - MAIN PUMP MOTOR EXCITERS
CRA - MAIN PUMP STUDY
CRA - MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY
CRA - PUMPING PLANT RELIABILITY PROGRAM CONTINGENCY

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Conveyance and Aqueduct Facilites

CRA - PUMPING PLANTS VULNERABILITY ASSESSMENT
CRA - PUMPING WELL CONVERSION
CRA - QUAGGA MUSSEL BARRIERS
CRA - REAL PROPERTY - BOUNDARY SURVEYS
CRA - RELIABILITY PROGRAM 230 KV & 69 KV DISCONNECTS REPLACEMENT STUDY (5 PLANTS)
CRA - RELIABILITY PROGRAM INVESTIGATION
CRA - RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568
CRA - RELIABILTY PHASE II CONTINGENCY
CRA - SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE
CRA - SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION
CRA - SERVICE CONNECTION DWCV-4 A, B, C, & D PLUG VALVES REPLACEMENT
CRA - SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS
CRA - SUCTION & DISCHARGE LINES EXPANSION JOINT REHAB
CRA - SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM
CRA - SWITCHYARDS AND HEAD GATES REHAB
CRA - SWITCHYARDS AND HEAD GATES REHABILITATION
CRA - TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT
CRA - TUNNELS VULNERABILITY STUDY - REPAIRS TO TUNNELS
CRA - WEST PORTAL UPGRADE - REHAB OF STILLING WELL, SLIDE GATE OPERATORS AND RADIAL GATES
CRA 2.4 KV STANDBY DIESEL ENGINE GENERATORS REPLACEMENT
CRA 230 KV & 69 KV DISCONNECTS SWITCH REPLACEMENT
CRA 230 KV SYSTEM INTER-AGENCY OPERABILITY UPGRADES
CRA 230KV & 69KV PROTECTION PANEL UPGRADE
CRA 6.9 KV LEAD JACKETED CABLES
CRA 69KV PANEL UPGRADE
CRA ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT
CRA ALL PUMPING PLANTS - FLOW METER UPGRADES
CRA AQUEDUCT BLOCKER GATE REPLACEMENT
CRA AQUEDUCT ISOLATION GATES REPLACEMENT
CRA BLACK METAL COMMUNICATION SITE II UPGRADE
CRA CANAL CRACK REHAB AND EVALUATION
CRA CANAL CRACK REHABILITATION
CRA CANAL IMPROVEMENTS
CRA CIRCULATING WATER SYSTEM STRAINER REPLACEMENT
CRA CONDUIT FORMAT WASH EROSION REPAIRS
CRA CONVEYANCE RELIABILITY PROGRAM (CCRP) - BLOW-OFF REPAIR
CRA CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2
CRA COPPER BASIN AND GENE WASH DAM SLUICEWAYS
CRA COPPER BASIN OUTLET GATES RELIABILITY STUDY
CRA DESERT AIRFIELDS IMPROVEMENT
CRA DISCHARGE CONTAINMENT PROGRAM - CONTINGENCY
CRA DISCHARGE CONTAINMENT PROGRAM - GENE & IRON DRAIN SYSTEMS
CRA DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION
CRA DISCHARGE CONTAINMENT PROGRAM - OIL & CHEMICAL UNLOADING PAD CONTAINMENT
CRA ELECTRICAL / POWER SYSTEM RELIABILITY PROGRAM (CEPSRP)
CRA ENERGY EFFICIENCY IMPROVEMENTS
CRA GENE PUMPING PLANT HEAVY EQUIPMENT SERVICE PIT
CRA GENE STORAGE WAREHOUSE REPLACEMENT
CRA HINDS PUMPING PLANT - WASH AREA UPGRADE
CRA INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT
CRA IRON GARAGE HEAVY EQUIPMENT SERVICE PIT REPLACEMENT
CRA IRON HOUSING REPLACEMENT
CRA IRON MOUNTAIN SUCTION JOINT REFURBISHMENT PILOT
CRA MAIN PUMP & MOTOR REFURISHMENT
CRA MAIN PUMP CONTROLS & INSTRUMENTATION
CRA MAIN PUMP DISCHARGE VALVE REFURBISHMENT
CRA MAIN PUMP MOTOR EXCITERS ASSESSMENT
CRA MAIN PUMP MOTOR EXCITERS REHABILITATION
CRA MAIN PUMP STUDY
CRA MAIN PUMP SUCTION AND DISCHARGE LINES, EXPANSION JOINT REPAIRS
CRA MAIN PUMPING PLANT DISCHARGE LINE ISOLATION BULKHEAD COUPLING CONSTRUCTION
CRA MAIN PUMPING PLANT UNIT COOLERS & HEAT ESCHANGERS
CRA MAIN PUMPING PLANTS LUBRICATION SYSTEM
CRA MAIN PUMPING PLANTS SERVICE WATER & SAND REMOVAL SYSTEM
CRA MAIN TRANSFORMER REPLACEMENT/REHAB.
CRA MILE 12 POWER LINE & FLOW MONITORING EQUIP. STUDY
CRA PROTECTIVE SLABS
CRA PUMP PLANT FLOW METER UPGRADE
CRA PUMP PLANT SUMP PIPING REPLACEMENT STUDY
CRA PUMP PLANT UNINTERRUPTABLE POWER STUDY (UPS) UPGRADE
CRA PUMP PLANTS 2300KV & 480 V SWITCHRACK REHAB
CRA PUMP WELLS CONVERSION AND BLOW-OFF REPAIR
CRA PUMPING PLANT REHABILITATION STUDY
CRA PUMPING PLANT RELIABILITY PROGRAM - HIGH PRESSURE COMPRESSOR REPLACEMENT
CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY
CRA PUMPING PLANT SUMP SYSTEM REHABILITATION
CRA PUMPING PLANT WASTEWATER SYSTEM - GENE & IRON MTN.
CRA PUMPING PLANT WASTEWATER SYSTEM - INTAKE
CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT - HINDS & EAGLE MTN.
CRA PUMPING PLANTS - AUXILIARY POWER SYSTEM REHABILITATE/UPGRADES
CRA PUMPING PLANTS 230KV & 69K DISCONNECT SWITCH REPLACEMENT
CRA PUMPING PLANTS ASPHALT REPLACEMENT
CRA PUMPING PLANTS CRANE IMPROVEMENTS
CRA PUMPING PLANTS SWITCH HOUSE FAULT CURRENT PROTECTION
CRA PUMPING PLANTS VULNERABILITY ASSESSMENT
CRA PUMPING PLANTS WATER TREATMENT SYSTEMS REPLACEMENT
CRA PUMPING PLT RELIABILITY PROGRAM, DISCHARGE LINE COUPLING INSTALLATION
CRA PUMPING WELL CONVERSION
CRA QUAGGA MUSSEL BARRIERS
CRA RADIAL GATES AND SLIDE GATE REHABILITATION
CRA RADIAL GATES REPLACEMENT
CRA RELIABILITY PHASE II - PUMPING PLANTS 230KV & 69KV DISCONNECT SWITCH REPLACEMENT
CRA RELIABILITY PROGRAM - DISCHARGE VALVE LUBRICATORS
CRA RELIABILITY PROGRAM - MOTOR BREAKER FAULTY CURRENT STUDY (5 PLANTS)
CRA RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568
CRA RELIABILTY PHASE II - PUMPING PLANT SWITCH HOUSE FAULT CURRENT PROTECTION
CRA SAND TRAP EQUIPMENT UPGRADES
CRA SEISMIC EVALUATION - SWITCH HOUSE AND PUMP ANCHORAGE
CRA SEISMIC UPGRADE OF 6.9KV SWITCH HOUSES
CRA SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Conveyance and Aqueduct Facilites

CRA SERVICE CONNECTION DWCV-4 VALVES REPLACEMENT
CRA SIPHON REHAB
CRA SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS
CRA SWITCHRACKS & ANCILLARY STRUCTURES EROSION CONTROL
CRA TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT
CRA TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT
CRA VILLAGES DOMESTIC WATER MAIN DISTRIBUTION REPLACEMENT STUDY
CUF DECHLORINATION SYSTEM
DAM SLUICEWAYS AND OUTLETS REHABILITATION
DANBY TOWER FOOTER REPLACEMENT
DANBY TOWERS FOUNDATION REHABILITATION
DESERT FACILITIES FIRE PROTECTION SYSTEMS UPGRADE
DESERT LAND ACQUISITIONS
DESERT PUMP PLANT OIL CONTAINMENT
DESERT ROADWAY IMPROVEMENT
DESERT SEPTIC SYSTEM
DESERT SEWER SYSTEM REHABILITATION
DESERT WATER TANK ACCESS - FIRE WATER, CIRCULATING WATER, DOMESTIC WATER- STUDY
DISCHARGE LINE ISOLATION BULKHEAD COUPLINGS
DISTRIBUTION SYSTEM FACILITIES - REHABILITATION PROGRAM
DISTRIBUTION SYSTEM FACILITIES REHABILITATION PROGRAM - MAINTENANCE & STORAGE SHOP (PC-1)
DISTRIBUTION SYSTEM RELIABILITY PROGRAM - PHASE 2
DVL INLET / OUTLET TOWER FISH SCREENS REPLACEMENT
DVL TO SKINNER TRANSMISSION LINE STUDY
E. THORNTON IBBETSON GUEST QUARTERS
EAGLE AND HINDS EQUIPMENT WASH AREA UPGRADE
EAGLE KITCHEN UPGRADE
EAGLE MOUNTAIN PUMPING PLANT SCADA SYSTEM
EAGLE MOUNTAIN SAND TRAPS STUDY
EAGLE MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY
EAGLE MTN SAND TRAPS STUDY
EAGLE ROCK ASPHALT REPAIR PROJECT
EAGLE ROCK MAIN ROOF REPLACEMENT
ENHANCED VAPOR RECOVERY UPGRADES FOR GASOLINE DISPENSERS
ENVIRONMENTAL MITIGATION
ETIWANDA PIPELINE LINER REPAIR
ETIWANDA RESERVOIR LINER REPAIR
FUTURE SYSTEM RELIABILITY PROJECTS
GARVEY RESERVOIR - AUTOMATED DATA ACQUISITION SYSTEM
GARVEY RESEVOIR AUTOMATED DATA ACQUISITON SYSTEM REPLACEMENT
GENE & INTAKE P.P. - FREQUENCY PROTECTION RELAY REPLACEMENT
GENE & INTAKE PUMPING PLANT SURGE CHAMBER OUTLET GATES RE-COATING
GENE & INTAKE PUMPING PLANTS - REPLACE UNDER FREQUENCY PROTECTION RELAY
GENE AIR CONDITION
GENE CAMP STATION SERVICE TRANSFORMER REPLACEMENT
GENE PUMPING PLANT - AIR STRIP EXTENSION PROJECT
GENE PUMPING PLANT - HEAVY EQUIPMENT SERVICE PIT
GENE PUMPING PLANT - PEDDLER SUBSTATION REPLACEMENT
GENE PUMPING PLANT - SCADA SYSTEM
GENE PUMPING PLANT EXPANSION JOINT REHABILITATION
GENE PUMPING PLANT MAIN TRANSFORMER AREA
GENE PUMPING PLANT STANDBY GENERATOR REPLACEMENT
GENE STORAGE BUILDING REPLACEMENT
GENE STORAGE WAREHOUSE REPLACEMENT
HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB.
HIGHLAND PIPELINE CONSTRUCTION
HINDS EAGLE & IRON MOUNTAINS STORAGE BUILDINGS
HINDS PUMPING PLANT EQUIPMENT WASH AREA UPGRADES
HINDS PUMPING PLANT SCADA SYSTEM
HINDS PUMPING PLANT STANDBY GENERATOR REPLACEMENT
INLAND FDR, ARROWHEAD TUNNELS REDESIGN
INLAND FDR, ARROWHEAD WEST TUNNEL CONSTRUCTION
INLAND FDR, CONTRACT 9, CONSTRUCTION OF RIVERSIDE PPLN SOUTH
INLAND FDR, OWNER CONTROLLED INSURANCE PROGRAM
INLAND FDR, REACH 4, RUSD PPLN
INLAND FDR-CNTR #1/DEVIL CYN-WATERMAN RD
INLAND FDR-CNTR #4-SOFT GRND TNL/SANTA ANA
INLAND FDR-CONT #8-PIPEL PARALLEL TO DAVIS RD
INLAND FDR-ENVIRON. MITIG.
INLAND FEEDER - RIGHT OF WAY AND EASEMENT PROCUREMENT
INLAND FEEDER CONTINGENCY
INLAND FEEDER COST OF LAND AND RIGHT OF WAY
INLAND FEEDER ENVIRONMENTAL MITIGATION
INLAND FEEDER GROUNDWATER MONITORING
INLAND FEEDER HIGHLAND PIPELINE CLAIMS COST
INLAND FEEDER HIGHLAND PIPELINE CONSTRUCTION
INLAND FEEDER HIGHLAND PIPELINE DESIGN
INLAND FEEDER MENTONE PIPELINE CONSTRUCTION
INLAND FEEDER MENTONE PIPELINE DESIGN
INLAND FEEDER MENTONE PIPELINE RUSD CONSTRUCTION
INLAND FEEDER OWNER CONTROLLED INSURANCE PROGRAM
INLAND FEEDER PROGRAM REMAINING BUDGET/CONTINGENCY
INLAND FEEDER PROJECT MANAGEMENT SUPPORT
INLAND FEEDER PURCHASE OF LAND AND RIGHT OF WAY
INLAND FEEDER RAISE BURIED STRUCTURES AND REALIGN DAVIS RD.
INLAND FEEDER REVERSE OSMOSIS PLANT
INLAND FEEDER RIVERSIDE BADLANDS TUNNEL CONSTRUCTION
INLAND FEEDER RIVERSIDE NORTH PIPELINE DESIGN
INLAND FEEDER RUSD CLAIMS DEFENSE
INLAND FEEDER STUDIES
INLAND FEEDER UNDERGROUND STORAGE TANK REMOVAL & ABOVEGROUND STORAGE TANK INSTALLATION
INLAND FEEDER, ARROWHEAD EAST TUNNEL
INLAND FEEDER, ARROWHEAD TUNNELS CONSTRUCTION
INLAND FEEDER, CONTRACT #5, OPAL AVENUE PORTAL / BADLANDS TUNNEL
INLAND FEEDER, CONTRACT #7, RIVERSIDE NORTH PIPELINE CONSTRUCTION
INLAND FEEDER, PROGRAM MANAGEMENT
INLAND FEEDER/SBMWD HIGHLAND INTERTIE BYPASS LINE REHAB
INSULATION JOINT TEST STATIONS
INTAKE POWER AND COMMUNICATIONS LINE RELOCATION
INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Conveyance and Aqueduct Facilites

INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU
INTAKE PUMPING PLANT AUTOMATION PROGRAMMING
INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT
INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION
INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION (4 PLANTS)
INTAKE PUMPING PLANT POWER & COMMUNICATION LINE REPLACEMENT
INTAKE PUMPING PLANT SCADA SYSTEM
INTAKE PUMPING PLANT STANDBY GENERATOR REPLACEMENT
IRON MOUNTAIN GENERATOR REPLACEMENT
IRON MOUNTAIN PUMPING PLANT
IRON MOUNTAIN PUMPING PLANT DELIVERY LINE NO. 1 RELINING
IRON MOUNTAIN PUMPING PLANT HOUSING REPLACEMENT
IRON MOUNTAIN PUMPING PLANT SCADA SYSTEM
IRON MOUNTAIN SERVICE PIT REHABILITATION
JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE 2 REPAIRS
JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE I REPAIR
LAKE MATHEWS FOREBAY & HEADWORK FACILITY & EQUIPMENT
LAKE MATHEWS FOREBAY WALKWAY REPAIRS
LAKE MATHEWS ICS
LAKE MATHEWS INTERIM CHLORINATION SYSTEM
LAKE SKINNER - OUTLET CONDUIT FLOWMETER INSTALLATION
LAKE SKINNER BYPASS PIPELINE NO. 2 CATHODIC PROTECTION
LAKE SKINNER OUTLET CONDUIT
LAKEVIEW PIPELINE LEAK REPAIR AT STA. 2510+49
LAVERNE FACILITIES - EMERGENCY GENERATOR
LAVERNE FACILITIES - MATERIAL TESTING
LOWER FEEDER EROSION PROTECTION
MAGAZINE CANYON - VALVE REPLACEMENT FOR SAN FERNADO TUNNEL (STATION 778+80)
MAGAZINE CANYON OIL & WATER SEPARATOR
MAGAZINE CANYON OIL/WATER SEPARATOR
MAPES LAND ACQUISTION
MENTONE PPLN, RUSD, DEFENSE OF CLAIM
MILE 12 FLOW AND CHLORINE MONITORING STATION UPGRADES
MILE 12 POWER LINE & FLOW MONITORING EQUIPMENT STUDY
MILLS PLANT SUPPLY PUMP STATION STUDY
MINOR CAP FY 2011/12
MOTOR BREAKER FAULTY (5 PPLANTS)
NEWHALL TUNNEL - REPAIR STEEL LINER
NEWHALL TUNNEL - UPGRADE LINER SYSTEM
NITROGEN STORAGE STUDY AT DVL, INLAND FEEDER PC-1, AND LAKE MATHEWS
OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REPAIR
OC 88 PUMP PLANT FIRE PROTECTION STUDY
OC-71 SERVICE CONNECTION REPAIRS
OLINDA PCS FACILITY REHABILITATION AND UPGRADE
OLINDA PRESSURE CONTROL STRUCTURE FACILITY REHABILITATION AND UPGRADE
ORANGE COUNTY 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REPAIR
ORANGE COUNTY 88 PUMP PLANT FIRE PROTECTION STUDY
OWNER CONTROLLED INSURANCE PROGRAM
PALO VERDE VALLEY LAND PURCHASE - 16,000 ACRES
PALOS VERDES FEEDER REHABILITATION OF DOMINGUEZ CHANNEL
PALOS VERDES RESERVOIR SPILLWAY MODIFICATION
PROJECT MANAGEMENT SUPPORT
PUDDINGSTONE RADIAL GATE REHABILITATION
PURCHASE OF LAND AND RIGHT OF WAY
QUAGGA MUSSEL STUDY
R&R FOR CRA
REPAIR UPPER FEEDER LEAKING EXPANDSION JOINT
REPAIRS TO TUNNELS
RIALTO FEEDER REPAIR @ STA. 3662+23
RIALTO FEEDER REPAIR OF ANOMALOUS PIPE SECTION
RIVERSIDE BADLANDS TUNNEL CONSTRUCTION
RIVERSIDE BRANCH - ALESSANDRO BLVD. LEFT LAND TURN LANE
RIVERSIDE BRANCH - CONSTRUCTION OF CONTROL PANEL DISPLAY WALL
RIVERSIDE NORTH PIPELINE DESIGN & CONSTRUCTION
RIVERSIDE SOUTH PIPELINE CONSTRUCTION
SAN DIEGO PIPELINE REPAIR AT STATION 1268+57
SAN FERNANDO TUNNEL STATION 778+80 VALVE REPLACEMENT
SAN GABRIEL TOWER SEISMIC ASSESSMENT
SAN GABRIEL TOWER SLIDE GATE REHABILITATION
SAN JACINTO TUNNEL EAST ADIT REHABILITATION
SAN JACINTO TUNNEL, WEST PORTAL
SAN JOAQUIN RESERVOIR - NEW DESIGN
SAN JOAQUIN RESERVOIR IMPROVEMENT- FLOATING COVER
SAN JOAQUIN RESERVOIR IMPROVEMENTS
SAN JOAQUIN RESERVOIR IMPROVEMENTS STUDY
SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE STUDY
SANTA ANA RIVER BRIGDE SEISMIC RETROFIT
SANTIAGO TOWER ACCESS ROAD UPGRADE
SANTIAGO TOWER PATROL ROAD REPAIR
SD5 REPAIR
SECOND LOWER FEEDER CARBON FIBER REPAIRS
SECOND LOWER FEEDER STRAY CURRENT MITIGATION SYSTEMS REFURBISHMENT
SECURITY FENCING AT OC-88 PUMPING PLANT
SEISMIC EVALUATION OF CRA STRUCTURES
SEISMIC PROGRAM
SEISMIC UPGRADE OF 11 FACILITIES OF THE CONVEYANCE & DISTRIBUTION SYSTEM
SEPULVEDA FEEDER CORROSION INTERFERENCE MITIGATION
SEPULVEDA FEEDER REPAIR AT STATION 1099
SEPULVEDA FEEDER STRAY CURRENT MITIGATION SYSTEM REFURBISHMENT
SERVICE CONNECTION & EOCF #2 METER ACCESS ROAD UPGRADE & BETTERMENT
SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STUCTURE CONSTRUCTION
SKINNER BR - IMPROVE CABAZON RADIAL GATE FACILITY
SKINNER FILTRATION PLANT HELIPAD UPGRADE
SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY
SWITCHYARDS AND HEAD GATES REHAB
TEMESCAL HYDRO-ELECTRIC PLANT ACCESS ROAD UPGRADE
TEMESCAL POWER PLANT ACCESS ROAD PAVING
TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT
TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT PROJECT

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description	
Conveyance and Aqueduct Facilites	
U.S. BUREAU OF LAND MANAGEMENT LAND ACQUISITION	
UPPER FEEDER CATHODIC PROTECTION SYSTEM	
UPPER FEEDER GATES REHABILITATION PROJECTS	
UPPER FEEDER LEAKING EXPANDSION JOINT REPAIR	
UPPER FEEDER SCHEDULES 2S	
VALLEY BRANCH - PIPELINE CORROSION TEST STATION	
WEST VALLEY FEEDER #2 CATHODIC PROTECTION SYSTEM REHABILITATION	
WEYMOUTH WATER TREATMENT PLANT - NORTH PERIMETER WALL	
WHITE WATER SIPHON PROTECTION	
WHITEWATER SIPHON PROTECTION STRUCTURE	
WHITEWATER SIPHONS EROSION PROTECTION	
Sub-total Conveyance and Aqueduct facilities benefits	***$ 107,399,399***

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Distribution Facilites

104568 - SITE 3 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN
42" CONICAL PLUG VALVE REPLACEMENT
ACCUSONIC FLOW METER UPGRADE
ACCUSTIC FIBER OPTIC MONITORING OF PCCP LINES
ALAMEDA CORRIDOR PIPELINE
ALL FACILITIES - WATER DISCHARGE ELIMINATION
ALL FACILITIES INSPECTION AND REPLACEMENT OF CRITICAL VACUUM VALVES
ALL FACILITIES, INSPECTION AND REPLACEMENT OF CRITICAL VACUUM VALVES
ALL FEEDERS - MANHOLE LOCKING DEVICE RETROFIT
ALL PUMPING PLANTS - INSTALL HYPOCHLORINATION STATIONS
ALLEN MCCOLLOCH PIPELINE 2010 REFURBISHMENT
ALLEN MCCOLLOCH PIPELINE CATHODIC PROTECTION
ALLEN MCCOLLOCH PIPELINE INTERCONNECTIONS
ALLEN MCCOLLOCH PIPELINE LOCAL CONTROL MODIFICATIONS
ALLEN MCCOLLOCH PIPELINE REPAIR
ALLEN MCCOLLOCH PIPELINE REPAIR - CARBON FIBER LINING REPAIR
ALLEN MCCOLLOCH PIPELINE REPAIR - SERVICE CONNECTIONS UPGRADES
ALLEN MCCOLLOCH PIPELINE REPAIR - STATION 276+63
ALLEN MCCOLLOCH PIPELINE REPAIR - SURGE SUPPRESSION SYSTEM AT OC88A
ALLEN MCCOLLOCH PIPELINE REPAIR - VALVE ACTUATOR REPLACEMENTS
ALLEN MCCOLLOCH PIPELINE REPAIR SERVICE CONNECTIONS SIMPLIFICATION
ALLEN MCCOLLOCH PIPELINE STRUCTURE - ROOF SLAB REPAIRS
ALLEN MCCOLLOCH PIPELINE VALVE VAULT REPAIRS
ALLEN-MCCOLLOCH CORROSION/INTERFERENCE MITIGATION, STATION 719+34 TO 1178+02
ALLEN-MCCOLLOCH PIPELINE
ALLEN-MCCOLLOCH PIPELINE PCCP REHABILITATION
ALLEN-MCCOLLOCH PIPELINE REFURBISHMENT - STAGE 2
ALLEN-MCCOLLOCH PIPELINE VALVE AND SERVICE CONNECTION VAULT REPAIRS
AMP -SERVICE CONNECTIONS UPGRADES
AMP -VALVE ACTUATOR REPLACEMENTS
AMP COMPLETION RESOLUTION RIGHT OF WAY ISSUES
AMR - RTU UPGRADE - PHASE 2
ANODE WELL REPLACEMENT FOR ORANGE COUNTY AND RIALTO FEEDERS
ARROW HIGHWAY PROPERTY DEVELOPMENT
ASPHALT REPAIRS TO PERIMETER OF SEPULVEDA PCS
ASSESS THE CONDITION OF METROPOLITAN'S PRESTRESSED CONCRETE CYLINDER PIPE
ASSESS THE CONDITIONS OF MET'S
ASSESSMENT OF PRESTRESSED CONCRETE CYLINDER PIPELINES - PHASE 3
AULD VALLEY CONTROL STRUCTURE AREA FACILITIES
AUTOMATED RESERVOIR WATER QUALITY MONITORING
AUTOMATIC METER READING SYSTEM - RTU UPGRADE PHASE 2
AUTOMATIC METER READING SYSTEM UPGRADE
AUTOMATION COMMUNICATION UPGRADE
AUTOMATION DOCUMENTATION SURVEY F/A
BAR 97- ENHANCED AREA VEHICLE TESTING
BATTERY MONITORING SYSTEM FOR AUTOMATIC METER READING SYSTEM
BIXBY VALVE REPLACEMENT
BLACK METAL MOUNTAIN ELECTRICAL TRANSFORMER
BOX SPRINGS FEEDER BROKEN BACK REPAIR
BOX SPRINGS FEEDER BROKEN BACK REPAIR PHASE I
BOX SPRINGS FEEDER PHASE 3 AND 4 ENVIRONMENTAL MONITORING
BOX SPRINGS FEEDER REPAIR - PHASE II
BOX SPRINGS FEEDER REPAIRS PHASE 3 AND PHASE 4
BUDGET ADJUSTMENT
C&D CRANE INSTALLATION AT OC-88 PUMPING PLANT
CAJALCO CREEK DAM MANHOLE COVER RETROFIT
CAJALCO CREEK DETENTION DAM SPILLWAY ACCESS ROAD
CALABASAS FEEDER CARBON FIBER /BROKEN BACK REPAIR
CALABASAS FEEDER INTERFERENCE MITIGATION
CALABASAS FEEDER PCCP REHABILITATION
CALABASAS FEEDER REPAIR, STUDY
CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN $250,000 FOR FY 2010/11
CAPITAL PROJECTS COSTING LESS THAN $250,000 FOR FY2008-09
CASA LOMA AND SAN DIEGO CANAL LINING STUDY - PART 2
CASA LOMA SIPHON BARREL 1 & 2 DVL AND SD CANAL FLOW METER REPLACEMENT
CATHODIC PROTECTION FOR THE FOOTHILL FEEDER
CATHODIC PROTECTION SYSTEM UPGRADES
CCP-PHASE 2 CONSTRUCTION
CDSRP - DISCHARGE ELIMINATION
CDSRP - ENTRAINED AIR IN UPPER FEEDER PIPELINE STUDY
CDSRP - SEPULVEDA FEEDER REPAIRS
CDSRP - SEPULVEDA TANKS RECOATING
CENTRAL POOL AUGMENTATION - TUNNEL AND PIPELINE & RIGHT-OF-WAY ACQUISITION
CENTRAL POOL AUGMENTATION (CPA) PROGRAM - PIPELINE AND TUNNEL ALIGNMENT
CENTRAL POOL AUGMENTATION AND WATER QUALITY PROJECT (CPAWQP)
CHEMICAL INVENTORY AND USAGE REWRITE AND ELECTRICAL. SYSTEM LOG
CHEMICAL UNLOADING FACILITY RETROFIT
CHEVALIER FALCON MILLING MACHINE
COASTAL JUNCTION REVERSE FLOW BYPASS
COASTAL PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT
COLLIS VALVE REPLACEMENT
COMMUNICATIONS STRUCTURE ALARM MONITORING
COMPREHENSIVE INFORMATION SECURITY ASSESSMENT PHASE III
CONSTRUCTION PHASE 2
CONTRACT & LITIGATION TASKS -CONTRACT # 1396
CONTROL SYSTEM DATA STORAGE AND REPORTING
CONTROL SYSTEM DRAWING & DOCUMENTATION UPDATE
CONTROL SYSTEM ENHANCEMENT PROGRAM (CSEP) - DIGITAL SUBNET STANDARDIZATION
CONTROL SYSTEMS AUTOMATION COMMUNICATION UPGRADE
CONTROLS COMMUNICATIONS FRAME RELAY CONVERSION - APPROPRIATED
CONVERSION OF DEFORMATION SURVEY MONITORING AT GENE WASH, COPPER BASIN, AND DIEMER BASIN 8
CONVEYANCE AND DISTRIBUTION SYSTEM REHABILITATION PROGRAM (CDSRP) - CURRENT DRAIN STATIONS
COPPER BASIN ICS
COPPER BASIN SEWER SYSTEM
CORONA POWER PLANT REPLACE EMERGENCY GENERATOR
CORROSION MATERIALS TESTING FACILITY SCADA UPGRADE
COVINA PRESSURECONTROL FACILITY

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Distribution Facilites

COYOTE CREEK NORTHERN PERIMETER LANDSCAPING
COYOTE PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT
CPA PIPELINE & TUNNEL ALIGNMENT
CPA PIPELINE & TUNNEL ALIGNMENT - NON FUNDED PORTION
CPA PIPELINE & TUNNEL ALIGNMENT - STUDY
CPA WATER TREATMENT PLANT - NON FUNDED PORTION
CPA WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2
CPA WATER TREATMENT PLANT - STUDY
CPAWQP - PHASE 2
CPAWQP - STUDY AND LAND ACQUISITION - CONTINGENCY
CPAWQP - STUDY AND LAND ACQUISITION - PIPELINE & TUNNEL ALIGNMENT - STUDY
CPAWQP - STUDY AND LAND ACQUISITION - RIGHT-OF-WAY-ACQUISITION
CPAWQP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2
CPAWQP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - STUDY
CRA - PC-1 EFFLUENT OPEN CHANNEL TRASH RACK
CRA CABAZON & POTRERO SHAFT COVERS
CRA CONTROL INTEGRATION
CRA PROTECTIVE SLAB AT STATION 9704+77
CROSS CONNECTION PREVENTION PROGRAM - PHASE II CONSTRUCTION
CROSS CONNECTION PREVENTION PROJECT, COMPLETE PRELIMINARY DESIGN AND CEQA DOCUMENTATION
CSEP - ELECTRONIC SYSTEM LOG (ESL)
CSEP - ENERGY MANAGEMENT SYSTEM PHASE II
CSEP - ENHANCED DISTRIBUTION SYSTEM CONTROL PROJECT
CSEP - IMPLEMENTATION
CSEP - OPERATIONS & BUSINESS DATA INTEGRATION PILOT
CSEP - PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING
CSEP - PLC PHASE 2 - LIFE-CYCLE REPLACEMENT
CSEP - PLC STANDARDIZATION
CSEP - PLC STANDARDIZATION PHASE II
CSEP - POWER MANAGEMENT SYSTEM
CSEP - WATER PLANNING APPLICATION
CSEP IMPLEMENTATION
CSEP- SMART OPS (FORMERLY REAL TIME OPERATIONS SIMULATION)
CURRENT DRAIN STATIONS
DAM REHABILITATION & SAFETY IMPROVEMENTS ST. JOHN'S CANYON CHANNEL EROSION MITIGATION
DANBY TOWER FOUNDATION INVESTIGATION AND SHORT TERM MITIGATION
DEODERA PCS PAVEMENT UPGRADE & BETTERMENT
DESERT BRANCH - REPLACE STOLEN COPPER GROUND WIRE FOOTINGS/GROUNDING, AND COPPER PIPING
DESERT BRANCH PUMP PLANT AUXILIARY (STATION SERVICE)
DESERT BRANCH, PURCHASE & INSTALL 5 PORT VIDEO CONFERENCING
DESERT FACILITIES DOMESTIC WATER GAC SYSTEM INSTALLATION
DESERT HIGH VOLTAGE TRANSMISSION TOWERS - REPLACE COPPER GROUND WIRES ON
DETAIL SEISMIC EVALUATION OF WATER STORAGE TANK
DFP - ELIMINATE BACKUP GENERATOR TIE-BUS & INSTALL MANUAL TRANSFER SWITCH FOR CHLORINE SCRUBBER
DIEMER FILTRATION PLANT - SLOPE REPAIR
DIEMER IRRIGATION RAW WATER CONVERSION TO INDUSTRIAL WATER
DISCHARGE ELIMINATION
DIST SYS-AIR RELEASE & VAC VALVE MODS
DISTRIBUTION SYSTEM - CCPP CONSTRUCTION PACKAGES 9,11,12
DISTRIBUTION SYSTEM - STANDPIPE STRENGTHENING PROGRAM
DISTRIBUTION SYSTEM - STATIONARY CORROSION REFERENCE
DISTRIBUTION SYSTEM - TREATED WATER CROSS CONNECTION PREVENTION PROJECT - FINAL DESIGN & CONSTRUCTION
DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF LOS ANGELES COUNTY
DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF RIVERSIDE AND SAN DIEGO COUNTY
DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF SAN BERNARDINO COUNTY
DISTRIBUTION SYSTEM CONTROL & EQUIP UPGRADE - ENHANCED DISTRIB. SYSTEM AUTOMATION PHASE I
DISTRIBUTION SYSTEM EQUIPMENT & INSTRUMENTATION UPGRADES
DISTRIBUTION SYSTEM INFRASTRUCTURE PROTECTION IMPROVEMENTS FOR ORANGE COUNTY
DISTRIBUTION SYSTEM REHABILITATION PROGRAM - ASSESS THE STATE OF MWD'S DISTRIBUTION SYSTEM
DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS - WILLOWGLEN RTUS ADMINISTRATION
DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS (DSRACS)
DISTRICT WIDE - ENHANCED VAPOR RECOVERY PHASE 2 GASOLINE DISPENSING
DSRACS - OPERATIONS CONTROL CENTER - CONTRACT #1396
DSRACS - SKINNER AREA
DSRACS - SOFTWARE DEVELOPMENT COST
DSRACS - WEYMOUTH
DVL & CONTROL SYSTEM REPLACEMENT INVESTIGATION & PREPARATION FOR PRELIMINARY DESIGN
EAGLE EQUIPMENT WASH AREA UPGRADE
EAGLE ROCK - ASPHALT REHABILITATION
EAGLE ROCK - FIRE PROTECTION AT THE WESTERN AREA OF THE EAGLE ROCK CONTROL CENTER PERIMETER GROUNDS
EAGLE ROCK CONTROL CENTER FIREHYDRANT
EAGLE ROCK LATERAL INTERCONNECTION REPAIR
EAGLE ROCK MAIN BUILDING ROOF REPLACEMENT - STUDY
EAGLE ROCK OCC - REHAB CONTROL ROOM
EAGLE ROCK OPERATIONS CONTROL CENTER
EAGLE ROCK RESIDENCE CONVERSION
EAGLE ROCK TOWER AND PUDDINGSTONE SPILLWAY GATES REHABILITATION
EAGLE ROCK TOWER SLIDEGATE REHABILITATION
EAST INFLUENT CHANNEL REPAIR PROJECT
EAST ORANGE COUNTY FEEDER #2 REPAIR
EASTERN AND DESERT REGIONS PLUMBING RETROFIT
EASTERN REGION PCCP JOINT MODIFICATION 2012
E-DISCOVERY STORAGE MANAGEMENT SYSTEM UPGRADE
ELECTRIC CURRENT DRAIN STATION INSTALLATIONS
ELECTROMAGNETIC INSPECTION OF PCCP LINES
ELECTRONIC SYSTEM LOG (ESL)
ENERGY MANAGEMENT SYSTEM - PHASE 2
ENHANCED DISTRIBUTION SYSTEM AUTOMATIC FLOW TRANSFERS SOFTWARE REDEVELOPMENT
ENHANCED DISTRIBUTION SYSTEM AUTOMATION PHASE I
ENHANCED DISTRIBUTION SYSTEM AUTOMATION PHASE II
EQUIPMENT UPGRADE AT THE NORTH PORTAL OF THE HOLLYWOOD TUNNEL
ETIWANDA / RIALTO PIPELINE INTER-TIE CATHODIC PROTECTION
ETIWANDA CAVITATION FACILITY INFRASTRUCTURE REHABILITATION
ETIWANDA CAVITATION TEST FACILITY COMMUNICATION AND CONTROL SYSTEM REPLACEMENT
ETIWANDA HEP NEEDLE VALVE OPERATORS
ETIWANDA PIPELINE - LINING REPLACEMENT
ETIWANDA PIPELINE AND CONTROL FACILITY - RIGHT OF WAY

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Distribution Facilites

ETIWANDA PIPELINE AND CONTROL FACILITY - AS BUILTS
ETIWANDA PIPELINE AND CONTROL FACILITY - CATHODIC PROTECTION
ETIWANDA PIPELINE AND CONTROL FACILITY - EMERGENCY DISCHARGE CONDUITS
ETIWANDA PIPELINE AND CONTROL FACILITY - LANDSCAPING AND IRRIGATION
ETIWANDA PIPELINE AND CONTROL FACILITY - RESIDENCES
ETIWANDA PIPELINE AND CONTROL FACILITY - RIALTO FEEDER TO UPPER PIPELINE
ETIWANDA RESERVOIR - EXTEND OUTLET STRUCTURE
FACILITY AND PROCESS RELIABILITY ASSESSMENT
FILTER ISOLATION GATE AND BACKWASH CONTROL WEIR COVERS MODULES 1- 6
FLOWMETER MODIFICATION - LAKE SKINNER INLET, ETIWANDA EFFLUENT & WADSWORTH CROSS CHANNEL
FOOTHILL & SEPULVEDA FEEDER PCCP CARBON FIBER JOINT REPAIRS
FOOTHILL FEEDER ADEN AVE. REHABILITATION
FOOTHILL FEEDER CARBON FIBER REPAIR
FOOTHILL FEEDER CATHODIC PROTECTION
FOOTHILL FEEDER PIPELINE REPLACEMENT PROJECT
FOOTHILL FEEDER POWER PLANT EXPANSION
FOOTHILL FEEDER REPAIR @ SANTA CLARITA RIVER
FOOTHILL FEEDER, CARBON FIBER REPAIRS
FOOTHILL HYDROELECTRIC RUNNER REPLACEMENT
FOOTHILL PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION
FOOTHILL PCS FLOOD PUMP INSTALLATION DESIGN DOCUMENTATION
FOOTHILL PCS INTERNAL VALVE LINERS UPGRADE
FUTURE SYSTEM RELIABILITY PROGRAM
GARVEY RESERVOIR - HYPOCHLORITE FEED SYSTEM
GARVEY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS
GARVEY RESERVOIR - LOWER ACCESS PAVING ROAD & DRAINS
GARVEY RESERVOIR HYPOCLORITE FEED SYSTEM
GARVEY RESERVOIR SITE DRAINAGE REPAIRS AND MODIFICATIONS
GENE & IRON POOLS
GENE AIR CONDITIONING SYSTEM REPLACEMENT
GENE MESS HALL AIR CONDITIONING UNIT
GENE SPARE PARTS WAREHOUSE IMPROVEMENTS
GLENDALE 01 SERVICE CONNECTION REHAB
GLENDALE-01 SERVICE CONNECION REHABILITATION AND UPGRADE
GREG AVE PCS FACILITY REHABILITATION
GREG AVENUE CONTROL STRUCTURE VALVE REPLACEMENT
GREG AVENUE PCS CONTROL BUILDING INTERIOR REHABILITATION
HINDS GARAGE ASBESTOS SHEETING REPLACEMENT
HVAC MODIFICATIONS FOR ELECTRICAL SAFETY AND RELIABILITY
HYDRAULIC MODELING PROJECT
HYDROELECTRIC PLANT CARBON DIOXIDE (CO2) FIRE SUPPRESSION SYSTEM MODIFICATIONS
IAS PROJECTS - CPA
IAS PROJECTS - DVL-SKINNER
IAS PROJECTS - MILLS SUPPLY RELIABILITY
INLAND PCSUST REMOVAL & AST INSTALLATION
INSTALL MOTION SENSORS IN NEW EXPANSION
INSTALL TEST LEADS AT FOUR LOCATIONS
INSULATION JOINT TEST STATIONS
INTAKE PUMPING PLANT - UNDER FREQUENCY PROTECTION RELAY UPGRADE
IRON MOUNTAIN - TRANSFORMER OIL TANK RELOCATION
JENSEN DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT # 1396
JENSEN FILTRATION PLANT - REPLACE ADMINISTRATION BUILDING AIR CONDITIONING
JENSEN FILTRATION PLANT - ROAD RECONSTRUCTION
JENSEN FILTRATION PLANT - SANDBLASTING BOOTH PURCHASE & INSTALLATION
JENSEN FILTRATION PLANT - TRAVELING BRIDGE RETROFIT MODULE 2 & 3
LA VERNE FACILITIES - BRIDGEPORT E-2-PATH
LA VERNE FACILITIES - ENERGY CONSERVATION ECM1 - 10
LA VERNE FACILITIES - EXPANSION OF THE SANITARY SEWER
LA VERNE FACILITIES - HAZARDOUS WASTE STORAGE
LA VERNE FACILITIES - MAIN TRANSFORMERS REPLACEMENT
LA VERNE FACILITIES - MATERIALS TESTING LABORATORY
LA VERNE FACILITIES - REPLACEMENT OF FLOCCULATOR STUB SHAFT - BASINS 1 & 2
LA VERNE MACHINE SHOP - AIR CONDITIONING UNIT REPLACEMENT
LA VERNE MACHINE SHOP - REPAIR HORIZONTAL BORING MILL
LA-35 DISCHARGE STRUCTURE REPAIRS
LAKE MATHEWS - CONSTRUCTION OF BACKUP COMPUTER FACILITIES
LAKE MATHEWS - DIVERSION TUNNEL WALKWAY REPAIR
LAKE MATHEWS - FACILITY WIDE EMERGENCY WARNING AND PAGING SYSTEM
LAKE MATHEWS - FOREBAY MCC ROOF IMPROVEMENT
LAKE MATHEWS - MAIN DAM TOE SEEPAGE COLLECTION
LAKE MATHEWS - MULTIPLE SPECIES MANAGER'S OFFICE & RESIDENCE
LAKE MATHEWS - RENOVATION OF BLDGS. 8 & 15, GENERAL ASSEMBLY & ADMIN. BLDG. OFFICE AREAS
LAKE MATHEWS - RETROFIT LOWER ENTRANCE GATE SWING ARM
LAKE MATHEWS FOREBAY MCC ROOF IMPROVEMENT
LAKE MATHEWS MAIN DAM TOE SEEPAGE COLLECTION
LAKE MATHEWS RETROFIT LOWER ENTRANCE GATE SWING ARM
LAKE PERRIS BYPASS PIPELINE EXPLORATION
LAKE PERRIS EMERGENCY STANDBY GENERATOR AND TRANSFER SWITCH REPLACEMENT
LAKE SKINNER - AERATOR AIR COMPRESSOR REPLACEMENT
LAKE SKINNER - OUTLET TOWER VALVE REHABILITATION
LAKE SKINNER - REPLACEMENT AERATOR RING
LAKE SKINNER AERATOR AIR COMPRESSOR REPLACEMENT
LAKE SKINNER DAM ROAD REHAB
LAKE SKINNER EAST BYPASS SCREENING STRUCTURES
LAKE SKINNER OUTLET TOWER CHLORINE SYSTEM MODIFICATION
LAKE SKINNER WEST BYPASS SCREENING STRUCTURE
LAKE SKINNER WEST BYPASS SCREENING STRUCTURE REHABILITATION
LAKE VIEW PIPE LINE REPAIRS
LAKEVIEW PIPELINE - REPLACE VACUUM/AIR RELEASE
LAKEVIEW PIPELINE CATHODIC PROTECTION SYSTEM
LOWER FEEDER - CATHODIC PROTECTION
LOWER FEEDER WR 33 - AREA REPAIR AND REMEDIATION
MAGAZINE CANYON CANOPY
MAGAZINE CANYON-ISOLATION GATE JACKING FRAME
MAPES LAND ACQUISTION
MICROWAVE COMMUNICATION SITES BUILDING UPGRADE
MIDDLE CROSS FEEDER CATHODIC PROTECTION

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Distribution Facilites

MIDDLE FEEDER - CATHODIC PROTECTION SYSTEMS
MIDDLE FEEDER - NORTH CATHODIC PROTECTION SYSTEM
MIDDLE FEEDER NORTH CATHODIC PROTECTION SYSTEM
MILLS FILTRATION PLANT - INVESTIGATION TO RELOCATE ACCESS ROAD
MINOR CAP 08/09 PLACEHOLDER
MINOR CAP FY 2009/10
MINOR CAP FY 2012/13
MINOR CAP FY 2014/16
MINOR CAPITAL PROJECTS PROGRAM 07/08 - REMAINING FUNDS
MOUNT OLYMPUS TUNNEL COST RIGHT-OF-WAY (ROW)
MWD ROAD GUARDRAIL
NITROGEN STORAGE COMPLIANCE AT DVL, INLAND FEEDER PCS, AND LAKE MATHEWS
NITROGEN STORAGE STUDY
NON PCCP LINES CONDITION INSPECTION AND ASSESSMENT
NORTH PORTAL OF HOLLYWOOD TUNNEL
NORTH REACH CONSTRUCTION / INSPECTION / CM
NORTH REACH CONSTRUCTION/ASBUILT
NORTH REACH ENVIRONMENTAL - CONSTRUCTION
NORTH REACH FINAL DESIGN & ADV/NTP
NORTH REACH POST DESIGN / ASBUILT
NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION
NORTHERN PIPELINE ENVIRONMENTAL FINAL DESIGN
NORTHERN PIPELINE RIGHT OF WAY FINAL DESIGN
OAK ST. PCS ROOF REPLACEMENT
OAK STREET PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT - CONSTRUCTION
OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REHAB
OC FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS
OC RESERVOIR SODIUM HYPOCHLORITE PUMP AND PIPING REPLACEMENT
OC-71 FLOW CONTROL FACILITY
OC-88 - SECURITY FENCING AT PUMP PLANT
OC-88 EMERGENCY STANDBY GENERATOR UPGRADE STUDY
OC-88 PUMP PLANT AIR COMPRESSOR UPGRADE
OC-88 PUMP STATION FLOW METER UPGRADE
OC-88 PUMPING PLANT SURGE TANKS UPGRADES
OLINDA PCS AND SANTIAGO TOWER EMERGENCY GENERATORS
OLINDA PRESSURE CONTROL STRUCTURE
ON-CALL RESOURCES MANAGEMENT APPLICATION
OPERATIONS CONTROL CENTER AT EAGLE ROCK
OPERATIONS CONTROL CENTER UPS REPLACEMENT
OPERATIONS SCOPING STUDY
ORANGE CO FDR. BLOW-OFF STRUCTURE AND ACCESS ROAD REPAIR
ORANGE COUNTY - 88 PUMP PLANT AIR COMPRESSOR UPGRADE
ORANGE COUNTY - 88 SECURITY FENCING AT PUMP PLANT
ORANGE COUNTY C & D ELECTRICAL IMPROVEMENTS - STUDY
ORANGE COUNTY C&D INSTRUMENTATION PANEL IMPROVEMENTS
ORANGE COUNTY CONVEYANCE AND DISTRIBUTION SERVICE CENTER
ORANGE COUNTY FEEDER CATHODIC PROTECTION
ORANGE COUNTY FEEDER EXTENSION LINING REPAIR
ORANGE COUNTY FEEDER INSPECTION
ORANGE COUNTY FEEDER INTERNAL INSPECTION STUDY
ORANGE COUNTY FEEDER LINING REPAIR
ORANGE COUNTY FEEDER PRESSURE CONTROL STRUCTURES
ORANGE COUNTY FEEDER RELOCATION IN FULLERTON
ORANGE COUNTY FEEDER SCHEDULE 37SC CATHODIC PROTECTION
ORANGE COUNTY FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS
ORANGE COUNTY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS
ORANGE COUNTY RESERVOIR - PIEZOMETERS & SEEPAGE MONITORING AUTOMATION
OXIDATION DEMONSTRATION PLANT CONTROL SYSTEM REPLACEMENT
PALOS ALTOS FEEDER - 108TH ST.
PALOS VERDES FEEDER PCS - VALVE REPLACEMENT
PALOS VERDES RESERVOIR - INSTALL HYPOCHLORINATION STATIONS
PC-1 EFFLUENT OPEN CHANNEL TRASH RACK
PC-1 EFFLUENT OPEN CHANNEL TRASH RACK PROJECT
PCCP HYDRAULIC ANALYSES
PERIMETER FENCING AT PLACERITA CREEK
PERMANENT LEAK DETECTION/PIPELINE MONITORING SYSTEM
PERRIS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION
PERRIS PCS ROOF REHAB
PERRIS PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT
PERRIS PUMPBACK COVER
PERRIS VALLEY PIPELINE - DESIGN-BUILD (EMWD)
PERRIS VALLEY PIPELINE - GENERAL
PERRIS VALLEY PIPELINE - NORTH REACH
PERRIS VALLEY PIPELINE - RESERVED FOR STAGE II DESIGN / BUILD
PERRIS VALLEY PIPELINE - SOUTH REACH
PERRIS VALLEY PIPELINE - STUDY
PERRIS VALLEY PIPELINE - TIE-IN (WMWD)
PERRIS VALLEY PIPELINE - VALVES
PERRIS VALLEY PIPELINE DESIGN-BUILD (EMWD)
PERRIS VALLEY PIPELINE NORTH REACH
PERRIS VALLEY PIPELINE SOUTH REACH
PERRIS VALLEY PIPELINE TIE-IN (WMWD)
PERRIS VALLEY PIPELINE VALVES
PLACENTIA RAILROAD LOWERING PROJECT
PLACERITA CREEK PERIMETER FENCING
PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING
PLC REPLACEMENT PHASE II
PRESTRESSED CONCRETE CYLINDER PIPE - PHASE 2
PRESTRESSED CONCRETE CYLINDER PIPE -PHASE 3
PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF ORANGE COUNTY
PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF SAN BERNARDINO COUNTY
PROGRAMMABLE LOGIC CONTROLLER (PLC) STANDARDIZATION
PUDDINGSTONE SPILLWAY CROSS CONNECTION
PV RESERVOIR HYPOCHLORITE PUMP AND PIPING REPLACEMENT
R&R FOR DISTRIBUTION
RED MOUNTAIN - OCT. 2007 FIRE DAMAGE - COMMUNICATION POWER TOWERS & METER STRUCTURES REPAIR/REPLACE (INCIDENT NO. 2007-1023-0271)
RED MOUNTAIN HEP FLOOD DAMAGE

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Distribution Facilites

RED MTN COMM. TOWER & METER STRUCTURE
REHABILITATION OF THE GREG AVE PCS CONTROL BUILDING INTERIOR
RELOCATION OF ORANGE COUNTY FEEDER
RELOCATION OF PORTION OF ORANGE COUNTY FEEDER (MWD'S SHARE)
REMAINING PORTIONS
REPAIRS TO THE LA-35 DISCHARGE STRUCTURE
REPLACE 2 FIRE & DOMESTIC WATER SYSTEM
REPLACE COMMUNICATION LINE TO THE SAN GABRIEL CONTROL TOWER
REPLACE COPPER GROUNDWIRES ON DESERT HIGH VOLTAGE TRANSMISSION TOWERS
REPLACE VALVE POSITION INDICATORS
REPLACEMENT OF COMMUNICATION LINE AT SAN GABRIEL TOWER
REPLACEMENT/ RELINE AT-RISK PCCP LINES - STAGE 1
RIALTO FEEDER BROKEN BACK REPAIR
RIALTO FEEDER VALVE STRUCTURE
RIALTO FEEDER, REPAIRS AT SELECT LOCATIONS, STUDY
RIALTO PIPELINE - CONSTRUCTION PHASE 1
RIALTO PIPELINE - CONSTRUCTION PHASE 2
RIALTO PIPELINE IMPROVEMENTS
RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION
RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION PHASE III
RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 2
RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 3
RIALTO PIPELINE IMPROVEMENTS - FINAL DESIGN
RIALTO PIPELINE IMPROVEMENTS - VALVE PROCUREMENT
RIALTO PIPELINE IMPROVEMENTS PHASE 1 FINAL DESIGN
RIALTO PIPELINE PCCP REHABILITATION
RIALTO PIPELINE REPAIR @ STA 3196+44
RIALTO PIPELINE REPAIR AT THOMPSON CREEK
RIALTO PIPELINE REPAIRS AT STATION 3198+44
RIALTO PIPELINE VALVE PROCUREMENT
ROBERT B. DIEMER FILTRATION PLANT - LAND ACQUISITION
ROOF REPLACEMENT AT SOTO ST. FACILITY
SAN DIEGO #3 BLOWOFF TO PUMPWELL CONVERSION
SAN DIEGO CANAL - EAST & WEST BYPASS SCREENING STRUCTURES STUDY
SAN DIEGO CANAL - ELECTRICAL VAULT & CONDUCTOR REPLACEMENT
SAN DIEGO CANAL - FENCING
SAN DIEGO CANAL - INSTALL ACOUSTIC FLOW METER
SAN DIEGO CANAL - PIEZOMETER
SAN DIEGO CANAL - REPLACE SODIUM BISULFATE TANK
SAN DIEGO CANAL - SEEPAGE STUDY
SAN DIEGO CANAL BISULFITE TANK REPLACEMENT
SAN DIEGO CANAL LINER REPAIR
SAN DIEGO CANAL RADIAL GATE REHAB
SAN DIEGO CANAL SEEPAGE STUDY
SAN DIEGO CANAL WEST BYPASS TRASH RACK
SAN DIEGO PIPELINE #4 VALVE REPLACEMENT
SAN DIEGO PIPELINE 1 BLOW-OFF VALVE REPLACEMENT
SAN DIEGO PIPELINE 3 & 5 REMOTE CONTROL OF BYPASS
SAN DIEGO PIPELINE 4 AND AULD VALLEY PIPELINE CARBON FIBER REPAIRS
SAN DIEGO PIPELINE 5 & LAKE SKINNER OUTLET REPAIR
SAN DIEGO PIPELINE 6 - PRESSURE CONTROL STRUCTURE/HYDROELECTRIC PLANT - FEASIBILITY STUDY
SAN DIEGO PIPELINE 6 NORTH REACH, ENVIRONMENTAL MONITORING DURING CONSTRUCTION
SAN DIEGO PIPELINE NO. 3 BYPASS
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - ETIWANDA FACILITY/DROP INLET STRUCTURE
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - PLEASANT PEAK, COMMUNICATIONS
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILT
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL COST OF RIGHT OF WAY (OPTIONAL PORTAL SITE)
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL CONSTRUCTION
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PROGRAM MANAGEMENT
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL RIGHT OF WAY PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.1 SAN DIEGO CANAL TO MOUNT OLYMPUS
SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.2 MOUNT OLYMPUS TUNNEL & PORTALS
SAN DIEGO PIPELINE NO. 6 - NORTH REACH CONSTRUCTION - AS BUILT
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL - CONSTRUCTION
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH FINAL DESIGN & ADV/NTP
SAN DIEGO PIPELINE NO. 6 - NORTH REACH POST DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY FINAL DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTHERN PIPELINE COST OF RIGHT OF WAY
SAN DIEGO PIPELINE NO. 6 - NORTHERN REACH ENVIRONMENTAL FINAL DESIGN
SAN DIEGO PIPELINE NO. 6 - OPERATIONS SCOPING STUDY
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - DESIGN
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - ENVIRONMENTAL
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - PROJECT MANAGEMENT
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - RIGHT OF WAY
SAN DIEGO PIPELINE NO. 6 - PROJECT MANAGEMENT
SAN DIEGO PIPELINE NO. 6 - RIGHT OF WAY
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH - PROGRAM MANAGEMENT
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH / TUNNEL STUDY
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH CONSTRUCTION / AS BUILT
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH COST OF RIGHT OF WAY
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL - CONSTRUCTION
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL FINAL DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH FINAL DESIGN/ADV
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY FINAL DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH TUNNEL ALIGNMENT ANALYSIS
SAN DIEGO PIPELINE NO. 6 AREA STUDY
SAN DIEGO PIPELINE NO. 6 ENVIRONMENTAL MITIGATION

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Distribution Facilites

SAN DIEGO PIPELINE NO.4 & AULD VALLEY PIPELINE CARBON FIBER REPAIR STUDY
SAN DIEGO PIPELINE NOS. 1AND 3 - VALVE REPLACEMENT
SAN DIMAS CONTROL STRUCTURE 500 GALLONS DIESEL TANK REPLACEMENT
SAN DIMAS HEP BATTERY BANK AND GENERATOR BREAKER
SAN DIMAS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION
SAN FRANCISQUITO PIPELINE BLOW OFF STRUCTURE, STA 287+70, ACCESS ROAD CONSTRUCTION
SAN GABRIEL TOWER SEISMIC UPGRADE
SAN GABRIEL TOWER SLIDE GATE REHABILITATION
SAN JACINTO #1 AND #2 CASA LOMA FAULT CROSSING STRUCTURE UPGRADE
SAN JOAQUIN RELIEF STRUCTURE FOR EASTERN ORANGE COUNTY FEEDER #2
SAN JOAQUIN RELIEF STRUCTURE FOR EASTR OC FDR #2
SAN JOAQUIN RESERVOIR, INSTALL BULKHEAD
SANTA ANA RIVER BRIDGE SEISMIC RETROFIT
SANTA ANA RIVER BRIDGE SEISMIC UPGRADE
SANTA MONICA FEEDER RELOCATION
SANTA MONICA FEEDER STATION 495+10 REHABILITATION
SANTIAGO CONTROL TOWER CATHODIC PROTECTION
SANTIAGO LATERAL REPLACE MOTOR - OPERATED VALVE
SANTIAGO LATERAL SECTIONALIZATION VALVE REPLACEMENT
SANTIAGO LATERAL STA 216+40 BUTTERFLY VALVE REPLACEMENT
SANTIAGO PRESSURE CONTROL STRUCTURE
SANTIAGO TOWER ACCESS ROAD IMPROVEMENT
SCADA COMMUNICATIONS MPLS UPGRADE - AT&T REGION (MINOR CAP)
SCADA COMMUNICATIONS MPLS UPGRADE - VERIZON REGION (MINOR CAP)
SCADA SYSTEM HARDWARE UPGRADE
SCADA SYSTEM NT SOFTWARE UPGRADE
SCADA SYSTEM SUPPORT PROGRAMS
SD AND CASA LOMA CANALS LINING
SD CANAL EAST & WEST BYPASS SCREENING STRUCTURES STUDY
SD CANAL REPLACE SODIUM BISULFITE TANK
SD PIPELINE 3 CULVERT ROAD REHAB
SD PIPELINE 3,4, AND 5 PROTECTIVE COVER
SD PIPELINE 4 EXPLORATORY EXCAVATION
SD PIPELINE 5 EXPLORATOTY EXCAVATION
SD PIPELINES 3 AND 5 REMOTE CONTROL BYPASS STRUCTURE GATES AND ISOLATION VALVES
SECOND LOWER & SEPULVEDA FEEDERS SCI DRAIN STATIONS
SECOND LOWER CROSS FEEDER - VALVE PROCUREMENT
SECOND LOWER CROSS FEEDER CONSTRUCTION
SECOND LOWER CROSS FEEDER FINAL DESIGN
SECOND LOWER FEEDER - INSTALL LINER
SECOND LOWER FEEDER CATHODIC PROTECTION SYSTEM
SECOND LOWER FEEDER CURRENT MITIGATION REFURBISHMENT
SECOND LOWER FEEDER PCCP REHABILITATION
SECOND LOWER FEEDER PCCP REPAIRS
SECOND LOWER FEEDER RELIABILITY AT 3 LOCATIONS - SEISMIC STUDY
SEISMIC UPGRADE OF 11 FACILITIES ON THE ALLEN MCCOLLOCH PIPELINE
SELECTED PRESSURE REPLACE VALVE POSITION INDICATORS
SEPULVEDA CANYON CONTROL FACILITY WATER STORAGE TANKS SEISMIC UPGRADE
SEPULVEDA CANYON POWER PLANT TAIL RACE COATINGS
SEPULVEDA CANYON TANKS EXTERIOR AND INTERIOR RECOATING
SEPULVEDA FEEDER - CARBON FIBER LINER REPAIRS
SEPULVEDA FEEDER CATHODIC PROTECTION SYSTEM
SEPULVEDA FEEDER CORROSION/INTERFERENCE MITIGATION, STATION 950+00 TO 1170+00
SEPULVEDA FEEDER HEP AUTO PILOT
SEPULVEDA FEEDER REPAIRS AT 3 SITES
SEPULVEDA FEEDER SOUTH CATHODIC PROTECTION SYSTEM
SEPULVEDA FEEDER STATION 2002+02 TO 2273+28 STRAY CURRENT INTERFERENCE MITIGATION
SEPULVEDA FEEDER STRAY CURRENT MITIGATION REFURBISHMENT
SEPULVEDA PCS - PERIMETER ASPHALT REPAIRS
SEPULVEDA PIPELINE PCCP REHABILITATION
SERVICE CONNECTION LV-01 UPGRADES
SERVICE CONNECTION OC-26 - RELOCATION OF METER CABINET, INSTRUMENT HOUSING & AIR VENT STACK
SIMULATION AND MODELING APPLICATION FOR REAL TIME OPERATIONS SMART OPS
SITES 1 & 2 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN & PIPE FABRICATION
SKINNER BRANCH - AIR INJECTION MODIFICATIONS TO RED MOUNTAIN POWER PLANT
SKINNER BRANCH - CASA LOMA CANAL
SKINNER BRANCH - CASA LOMA SIPHON BARREL ONE
SKINNER BRANCH - CATWALK FOR TRAVELING MAINTENANCE BRIDGE FOR
SKINNER BRANCH - FABRICATE & REPLACE THE STEMS, NUTS & KEYS
SKINNER BRANCH - REPAIR MODULE 1 AND 2 FLOCCULATORS BRIDGES
SKINNER DAM REMEDIATION
SKINNER DISTRIBUTION SYSTEM - CONTRACT # 1396
SKINNER ELECTRICAL BUILDING HVAC UPGRADE
SKINNER FILTRATION PLANT - ELEVATED SLAB IN SERVICE BLDG 1
SKINNER HELIPAD REHAB
SKINNER INSULATING FLANGES AT PLANT 1 BUTTERFLY VALVES
SKINNER REPLACEMENT FOR WETCELL BATTERY AND INVERTER
SKINNER SCADA SERVERS RELOCATION
SMART-OPS (FORMERLY RTOS)
SOTO STREET FACILITY - BUILDING SEISMIC UPGRADE
SOTO STREET FACILITY - REPLACE HEATING
SOTO STREET FACILITY - ROOF REPLACEMENT
SOUTH COUNTY PIPELINE PROTECTION AT SAN JUAN CREEK CROSSING
SOUTH REACH / TUNNEL STUDY
SOUTH REACH CONSTRUCTION/ASBUILT - FUTURE UNAPPROPRIATED
SOUTH REACH DESIGN - FUTURE/UNAPPROPRIATED
SOUTH REACH ENVIRONMENTAL - FUTURE/UNAPPROPRIATED
SOUTH REACH FEASIBILITY STUDY
SOUTH REACH PROJECT MANAGEMENT - FUTURE/UNAPPROPRIATED
SOUTH REACH RIGHT OF WAY - FUTURE/UNAPPROPRIATED
SPECIAL SERVICE BRANCH - REPLACE PLATE BENDING
ST. JOHN'S CANYON CHANNEL EROSION MITIGATION
SYSTEM RELIABILITY PROGRAM
TEMESCAL POWER PLANT REPLACE EMERGENCY GENERATOR
TREATED WATER CROSS CONNECTION PREVENTION - FINAL DESIGN & CONSTRUCTION
TREATED WATER CROSS CONNECTION PREVENTION - UNFUNDED WORK
TWO-WAY RADIO ENHANCEMENT - EMERGENCY SERVICES, FIRE CONTROL, EVACUATION & BLDG. MAINT.

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM BENEFITS

Description

Distribution Facilites

TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BLDG. MAINTENANCE
UNDER GROUND STORAGE TANK DISPENSER SPILL CONTAINMENT & REMEDIATION
UNION STATION TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BUILDING MAINTENANCE
UPGRADE CATHODIC PROTECTION RECTIFIERS
UPGRADE HOLLYWOOD TUNNEL PORTAL SLEEVE VALVE EQUIPMENT
UPGRADE SUNSET GARAGE
UPPER FEEDER - SANTA ANA RIVER BRIDGE REPAIRS
UPPER FEEDER AIR ENTRAINMENT
UPPER FEEDER GATE REHABILITATION
UPPER FEEDER JUNCTION STRUCTURE SEISMIC UPGRADE
UPPER FEEDER SANTA ANA RIVER DISCHARGE PAD
UPPER FEEDER SERVICE CONNECTIONS UPGRADES
UPPER NEWPORT BAY BLOW-OFF STRUCTURE REHABILITATION
UPS SYSTEMS INSTALLATION AT FOOTHILL PCS
UPS SYSTEMS INSTALLATION AT PERRIS CONTROL STRUCTURE
UTILITY BUSINESS ARCHITECTURE (OBJECT MAPPING/MODELING)
VACUUM AIR RELEASE VALVE RELOCATION PILOT PROGRAM
VALLEY & LOS ANGELES DISTRIBUTION VALVE POSITION DISPLAY UPGRADE
VALVE PROCUREMENT
VIDEO CONFERENCE SYSTEM UPGRADE
VIDEOCONFERENCING UPGRADE
WADSWORTH PUMPING PLANT - MODIFICATION/REPAIRS OF FIFTY-NINE 6.9KV BREAKERS/CABINETS
WADSWORTH PUMPING PLANT CONDUIT REPAIR AND PROTECTION
WADSWORTH PUMPING PLANT FOREBAY GANTRY CRANE UPGRADE
WADSWORTH PUMPING PLANT RECOATING 144" YARD PIPING
WADSWORTH PUMPING PLANT STOP LOGS ADDITION - STUDY
WATER DELIVERY SYSTEM AUTOMATION
WATER PLANNING APPLICATION
WATER QUALITY - REMOTE MONITORING
WATER QUALITY LABORATORY BUILDING EXPANSION
WATER QUALITY MONITORING AND EVENT DETECTION SYSTEM
WATER TREATMENT PROCESS OPTIMIZATION
WEST COAST FEEDER - CATHODIC PROTECTION SYSTEMS
WEST OC FEEDER VALVE REPLACEMENT
WEST VALLEY AREA STUDY
WEST VALLEY FEEDER # 1 STAGE 2 VALVE STRUCTURE MODIFICATIONS - CONSTRUCTION
WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURES IMPROVEMENTS
WEST VALLEY FEEDER NO. 1 VALVE STRUCTURE MODIFICATIONS
WESTERN REGION PLUMBING RETROFIT
WEYM. PLT/LA VERNE FAC-BACKFLO PREV ASSY
WEYMOUTH - BUILDING NO. 4 - HAND RAIL AND STAIRS ADDITION
WEYMOUTH - FLAG POLE AREA LANDSCAPE UPGRADE
WEYMOUTH ASPHALT REHABILITATION
WEYMOUTH COMPRESSED AIR SYSTEM
WEYMOUTH DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT #1396
WFP - ASPHALT REHABILITATION
WFP - COMPRESSED AIR SYSTEM IMPROVEMENT
WFP - LAND ACQUISITION
WFP - PURCHASE OF REAL PROPERTY
WFP - REPAIR TO BLDG # 1
WFP - REPLACE ACTUATORS/OPERATORS/ MOTORS FOR EFFLUENT VALVE CONVERSION FILTER BEDS 1-24
WFP - WASHWATER RECLAMATION (WWRP)
YORBA LINDA FDR STA 924+11 PORTAL ACCESS
YORBA LINDA FEEDER - STA 924+11 PORTAL ACCESS
YORBA LINDA FEEDER BYPASS
YORBA LINDA PORTAL STRUCTURE ACCESS/TELEGRAPH CREEK BRIDGE

Sub-total Distribution facilities benefits	**$**	**90,953,126**
Sub-total Conveyance and Distribution facilities benefits	***$***	***198,352,525***

TABLE 4
Option 1
FISCAL YEAR 2014/15
ESTIMATED READINESS-TO-SERVE CHARGE REVENUE

Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2002/03 - FY2011/12	RTS Share	6 months @ $166 million per year (7/14-12/14)	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2003/04 - FY2012/13	RTS Share	6 months @ $158 million per year (1/15-6/15)	Total RTS Charge FY 2014/15
Anaheim	22,300	1.26%	1,049,687	22,572	1.30%	1,028,541	2,078,228
Beverly Hills	11,730	0.67%	552,157	11,524	0.66%	525,122	1,077,279
Burbank	12,419	0.70%	584,551	12,642	0.73%	576,063	1,160,614
Calleguas MWD	109,906	6.23%	5,173,382	109,981	6.34%	5,011,627	10,185,009
Central Basin MWD	59,023	3.35%	2,778,256	56,302	3.25%	2,565,571	5,343,827
Compton	2,659	0.15%	125,176	2,538	0.15%	115,666	240,841
Eastern MWD	95,190	5.40%	4,480,705	97,935	5.65%	4,462,727	8,943,432
Foothill MWD	10,742	0.61%	505,618	10,373	0.60%	472,673	978,291
Fullerton	10,303	0.58%	484,977	10,147	0.59%	462,366	947,343
Glendale	20,822	1.18%	980,088	20,503	1.18%	934,283	1,914,371
Inland Empire Utilities Agency	59,847	3.39%	2,817,052	60,010	3.46%	2,734,520	5,551,572
Las Virgenes MWD	22,612	1.28%	1,064,355	22,797	1.31%	1,038,803	2,103,157
Long Beach	34,705	1.97%	1,633,612	34,315	1.98%	1,563,661	3,197,273
Los Angeles	286,738	16.26%	13,497,022	289,350	16.69%	13,185,152	26,682,174
Municipal Water District of Orange County	222,903	12.64%	10,492,256	222,281	12.82%	10,128,912	20,621,169
Pasadena	22,301	1.26%	1,049,739	21,669	1.25%	987,397	2,037,136
San Diego County Water Authority	419,555	23.79%	19,748,838	393,731	22.71%	17,941,593	37,690,431
San Fernando	126	0.01%	5,940	138	0.01%	6,279	12,220
San Marino	965	0.05%	45,405	1,002	0.06%	45,650	91,055
Santa Ana	13,478	0.76%	634,404	13,509	0.78%	615,575	1,249,979
Santa Monica	11,670	0.66%	549,328	11,001	0.63%	501,277	1,050,604
Three Valleys MWD	69,362	3.93%	3,264,932	68,167	3.93%	3,106,237	6,371,169
Torrance	19,258	1.09%	906,469	18,845	1.09%	858,727	1,765,196
Upper San Gabriel Valley MWD	17,594	1.00%	828,143	17,081	0.99%	778,358	1,606,501
West Basin MWD	133,317	7.56%	6,275,375	131,114	7.56%	5,974,636	12,250,011
Western MWD	73,772	4.18%	3,472,534	74,144	4.28%	3,378,584	6,851,118
MWD Total	1,763,295	100.00%	$ 83,000,000	1,733,668	100.00%	$ 79,000,000	$ 162,000,000

Totals may not foot due to rounding

TABLE 4
Option 2
FISCAL YEAR 2014/15
ESTIMATED READINESS-TO-SERVE CHARGE REVENUE

Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2002/03 - FY2011/12	RTS Share	6 months @ $166 million per year (7/14-12/14)	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2003/04 - FY2012/13	RTS Share	6 months @ $155 million per year (1/15-6/15)	Total RTS Charge FY 2014/15
Anaheim	22,300	1.26%	1,049,687	22,572	1.30%	1,009,011	2,058,699
Beverly Hills	11,730	0.67%	552,157	11,524	0.66%	515,152	1,067,308
Burbank	12,419	0.70%	584,551	12,642	0.73%	565,125	1,149,676
Calleguas MWD	109,906	6.23%	5,173,382	109,981	6.34%	4,916,469	10,089,852
Central Basin MWD	59,023	3.35%	2,778,256	56,302	3.25%	2,516,858	5,295,114
Compton	2,659	0.15%	125,176	2,538	0.15%	113,469	238,645
Eastern MWD	95,190	5.40%	4,480,705	97,935	5.65%	4,377,992	8,858,696
Foothill MWD	10,742	0.61%	505,618	10,373	0.60%	463,699	969,316
Fullerton	10,303	0.58%	484,977	10,147	0.59%	453,587	938,564
Glendale	20,822	1.18%	980,088	20,503	1.18%	916,543	1,896,632
Inland Empire Utilities Agency	59,847	3.39%	2,817,052	60,010	3.46%	2,682,599	5,499,650
Las Virgenes MWD	22,612	1.28%	1,064,355	22,797	1.31%	1,019,079	2,083,433
Long Beach	34,705	1.97%	1,633,612	34,315	1.98%	1,533,971	3,167,583
Los Angeles	286,738	16.26%	13,497,022	289,350	16.69%	12,934,801	26,431,823
Municipal Water District of Orange County	222,903	12.64%	10,492,256	222,281	12.82%	9,936,591	20,428,847
Pasadena	22,301	1.26%	1,049,739	21,669	1.25%	968,649	2,018,388
San Diego County Water Authority	419,555	23.79%	19,748,838	393,731	22.71%	17,600,930	37,349,768
San Fernando	126	0.01%	5,940	138	0.01%	6,160	12,100
San Marino	965	0.05%	45,405	1,002	0.06%	44,783	90,188
Santa Ana	13,478	0.76%	634,404	13,509	0.78%	603,887	1,238,291
Santa Monica	11,670	0.66%	549,328	11,001	0.63%	491,759	1,041,086
Three Valleys MWD	69,362	3.93%	3,264,932	68,167	3.93%	3,047,258	6,312,190
Torrance	19,258	1.09%	906,469	18,845	1.09%	842,422	1,748,891
Upper San Gabriel Valley MWD	17,594	1.00%	828,143	17,081	0.99%	763,579	1,591,722
West Basin MWD	133,317	7.56%	6,275,375	131,114	7.56%	5,861,194	12,136,568
Western MWD	73,772	4.18%	3,472,534	74,144	4.28%	3,314,434	6,786,968
MWD Total	$ 1,763,295	100.00%	$ 83,000,000	$ 1,733,668	100.00%	$ 77,500,000	$ 160,500,000

Totals may not foot due to rounding

TABLE 4
Option 3
FISCAL YEAR 2014/15
ESTIMATED READINESS-TO-SERVE CHARGE REVENUE

Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2002/03 - FY2011/12	RTS Share	6 months @ $166 million per year (7/14-12/14)	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2003/04 - FY2012/13	RTS Share	6 months @ $157 million per year (1/15-6/15)	Total RTS Charge FY 2014/15
Anaheim	22,300	1.26%	1,049,687	22,572	1.30%	$ 1,022,031	2,071,718
Beverly Hills	11,730	0.67%	552,157	11,524	0.66%	521,799	1,073,955
Burbank	12,419	0.70%	584,551	12,642	0.73%	572,417	1,156,968
Calleguas MWD	109,906	6.23%	5,173,382	109,981	6.34%	4,979,908	10,153,290
Central Basin MWD	59,023	3.35%	2,778,256	56,302	3.25%	2,549,334	5,327,589
Compton	2,659	0.15%	125,176	2,538	0.15%	114,933	240,109
Eastern MWD	95,190	5.40%	4,480,705	97,935	5.65%	4,434,482	8,915,186
Foothill MWD	10,742	0.61%	505,618	10,373	0.60%	469,682	975,299
Fullerton	10,303	0.58%	484,977	10,147	0.59%	459,440	944,417
Glendale	20,822	1.18%	980,088	20,503	1.18%	928,370	1,908,458
Inland Empire Utilities Agency	59,847	3.39%	2,817,052	60,010	3.46%	2,717,213	5,534,264
Las Virgenes MWD	22,612	1.28%	1,064,355	22,797	1.31%	1,032,228	2,096,583
Long Beach	34,705	1.97%	1,633,612	34,315	1.98%	1,553,764	3,187,376
Los Angeles	286,738	16.26%	13,497,022	289,350	16.69%	13,101,702	26,598,724
Municipal Water District of Orange County	222,903	12.64%	10,492,256	222,281	12.82%	10,064,805	20,557,061
Pasadena	22,301	1.26%	1,049,739	21,669	1.25%	981,148	2,030,887
San Diego County Water Authority	419,555	23.79%	19,748,838	393,731	22.71%	17,828,039	37,576,877
San Fernando	126	0.01%	5,940	138	0.01%	6,240	12,180
San Marino	965	0.05%	45,405	1,002	0.06%	45,361	90,766
Santa Ana	13,478	0.76%	634,404	13,509	0.78%	611,679	1,246,083
Santa Monica	11,670	0.66%	549,328	11,001	0.63%	498,104	1,047,432
Three Valleys MWD	69,362	3.93%	3,264,932	68,167	3.93%	3,086,577	6,351,509
Torrance	19,258	1.09%	906,469	18,845	1.09%	853,292	1,759,761
Upper San Gabriel Valley MWD	17,594	1.00%	828,143	17,081	0.99%	773,432	1,601,575
West Basin MWD	133,317	7.56%	6,275,375	131,114	7.56%	5,936,822	12,212,197
Western MWD	73,772	4.18%	3,472,534	74,144	4.28%	3,357,201	6,829,734
MWD Total	$ 1,763,295	100.00%	$ 83,000,000	$ 1,733,668	100.00%	$ 78,500,000	$ 161,500,000

Totals may not foot due to rounding

TABLE 5

FISCAL YEAR 2014/15
ESTIMATED STANDBY CHARGE REVENUE

Member Agencies	Total Parcel Charge	Number Of Parcels Or Acres	Gross Revenues (Dollars) [1]
Anaheim	$ 8.55	69,017	$ 590,097
Beverly Hills	-	-	-
Burbank	14.20	29,107	413,317
Calleguas MWD	9.58	258,864	2,479,920
Central Basin MWD	10.44	340,060	3,550,226
Compton	8.92	18,097	161,423
Eastern MWD	6.94	405,643	2,815,162
Foothill MWD	10.28	30,375	312,254
Fullerton	10.71	34,528	369,797
Glendale	12.23	44,915	549,316
Inland Empire Utilities Agency	7.59	253,483	1,923,939
Las Virgenes MWD	8.03	57,156	458,963
Long Beach	12.16	92,020	1,118,959
Los Angeles	-	-	-
Municipal Water District of Orange County [2]	10.09	716,650	7,367,659
Pasadena	11.73	38,908	456,397
San Diego County Water Authority	11.51	1,102,717	12,692,275
San Fernando	7.87	5,117	40,272
San Marino	8.24	4,969	40,944
Santa Ana	7.88	54,217	427,231
Santa Monica	-	-	-
Three Valleys MWD	12.21	151,569	1,850,658
Torrance	12.23	40,590	496,420
Upper San Gabriel Valley MWD	9.27	211,682	1,962,293
West Basin MWD	-	-	-
Western MWD	9.23	378,506	3,493,609
MWD Total		4,338,191	$ 43,571,129

(1) Estimates per FY2012/13 applied amounts
(2) Adjusted for inclusion of Coastal MWD

Note: Totals may not foot due to rounding.

TABLE 6

PARCELS SUBJECT TO ANNEXATION STANDBY CHARGES
AS OF JULY 1, 2013

Annexation	Parcel Number	Acres	Proposed Standby Charge (FY 2014/15
Eastern MWD			
103rd Fringe	392-230-018	2.50	17.35
	392-230-019	2.51	17.42
	392-230-020	2.51	17.42
	392-230-023	2.28	15.82
	392-230-024	2.06	14.29
Ventura County:			
Annexation No. 95	139-0-260-055	4.50	43.11
	145-0-211-150	0.17	9.58
	145-0-211-175	0.54	9.58
Annexation No. 96	222-0-070-110	0.24	9.58
	222-0-070-185	1.96	18.78
	222-0-070-190	2.69	25.77

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

RESOLUTION ____

RESOLUTION OF THE BOARD OF DIRECTORS OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA FIXING AND ADOPTING A CAPACITY CHARGE EFFECTIVE JANUARY 1, 2015

WHEREAS, the Board of Directors ("Board") of The Metropolitan Water District of Southern California ("Metropolitan"), pursuant to Sections 133, 134 and 134.5 of the Metropolitan Water District Act (the "Act"), is authorized to fix such rate or rates for water as will result in revenue which, together with revenue from any water standby or availability of service charge or assessment, will pay the operating expenses of Metropolitan, provide for repairs and maintenance, provide for payment of the purchase price or other charges for property or services or other rights acquired by Metropolitan, and provide for the payment of the interest and principal of its bonded debt; and

WHEREAS, the capacity charge is a fixed fee imposed (on a dollar per cubic-foot-per-second basis) on member agencies on the amount of capacity used by such member agency and is designed to recover the cost of providing peaking capacity within the distribution system; and

WHEREAS, on February 10, 2014, the General Manager presented to the Finance and Insurance Committee of Metropolitan's Board his proposed biennial budget for fiscal years 2014/15 and 2015/16, determination of total revenues and of revenues to be derived from water sales and firm revenue sources required during the fiscal years 2014/15 and 2015/16, and detailed reports for each fiscal year describing each of the proposed rates and charges and the supporting cost of service process, dated April 2014, that (i) describe the rate structure process and design, (ii) identify revenue requirements; (iii) show the costs of major service functions that Metropolitan provides to its member agencies, (iv) classify these service functions costs based on the use of and benefit from the Metropolitan system to create a logical nexus between the costs and the revenues required from each of the rates and charges, and (v) set forth the rates and charges necessary to defray such costs; and

WHEREAS, the Metropolitan Board conducted a public hearing on its proposed rates and charges for 2015 and 2016 at its regular meeting on March 11, 2014, at which interested parties were given the opportunity to present their views regarding theproposed rates and charges; and

WHEREAS, notice of the public hearing on the proposed rates and charges was published prior to the hearing in various newspapers of general circulation within Metropolitan's service area; and

WHEREAS, based on the feedback received from board workshops held on February 25, 2014, and at the Finance and Insurance Committee on February 10 and March 10, 2014, the General Manager presented three alternative recommendations for rates and charges on March 11, 2014, with proposed cost reductions to accommodate the Board's request for lower rate increases; and

WHEREAS, updated cost of service reports, dated April 2014, for the three options included in the General Manager's recommendations for rates and charges were presented to the Board on April 8, 2014; and

WHEREAS, on April 8, 2014, the board considered the three alternative recommendations for rates and charges, approved the biennial budget for fiscal years 2014/15 and 2015/16 and adopted recommended water rates and charges for 2015 and 2016; and

WHEREAS, in adopting the rates and charges adopted on April 8, 2014, the Board determined the amount of revenue to be raised by the capacity charge in 2015 to be based on a capacity charge in such year of the amount per cubic-feet-per-second shown in Section 6 below for the rate option selected by the Board; and

WHEREAS, each of the meetings of the Board were conducted in accordance with the Brown Act (commencing at Section 54950 of the Government Code), for which due notice was provided and at which quorums were present and acting throughout; and

WHEREAS, the amount of revenue to be raised by the capacity charge shall be as determined by the Board and allocation of such charges among member public agencies shall be in accordance with the method established by the Board; and

WHEREAS, the capacity charge is a charge imposed by Metropolitan upon its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and

WHEREAS, Metropolitan has legal authority to impose the capacity charge as a water rate pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the "Act"); and

WHEREAS, under authority of Sections 133 and 134 of the Act, the Board has the authority to fix the rate or rates for water as will result in revenue which, together with other revenues, will pay Metropolitan's operating expenses and provide for the payment of other costs, including payment of the interest and principal of Metropolitan's non-tax funded debt; and

WHEREAS, the capacity charge is intended to recover the debt service and other appropriately allocated costs to construct, operate and maintain projects needed to meet peak demands on Metropolitan's distribution system, as shown in the Report; and

WHEREAS, in the alternative, under Section 134.5 of the Metropolitan Water District Act, an availability of service charge may be collected from the member public agencies within Metropolitan;

NOW, THEREFORE, the Board of Directors of The Metropolitan Water District of Southern California does hereby resolve, determine and order as follows:

Section 1. That the Board of Directors of Metropolitan hereby fixes and adopts a capacity charge, as described below, to be effective January 1, 2015.

Section 2. That the capacity charge shall be in an amount sufficient to provide for payment of the capital financing costs not paid from *ad valorem* property taxes, as well as operations, maintenance and overhead costs incurred to provide peaking capacity within Metropolitan's distribution system.

Section3. That such capacity charge effective January 1, 2015 shall be a water rate as specified in Section 6 (set in dollars per cubic-feet-per-second of the peak day capacity) for the rate option selected by the Board for capacity provided to a member agency.

Section 4. That in the alternative, and without duplication, the capacity charge shall be an availability of service charge pursuant to Section 134.5 of the Act.

Section 5. That the capacity charge specified in Table 1 does not exceed the reasonable and necessary cost of providing the service for which the chargeis made and is fairly apportioned to eachmember agency in proportion to the peak day capacity utilized by each member agency. Accordingly, the Board finds and determines that the capacity charge is a reasonable fee charged according to the burden on or benefit from the use of capacity of Metropolitan's distribution system.

Section 6. That the capacity charge shall be a fixed charge as shown in the following table for the rate option selected by the Board and collected from each member agency monthly, quarterly or semiannually as agreed to by Metropolitan and the member agency.

Table 1

Option 1: Calendar Year 2015 Capacity Charge

	Peak Day Demand (cfs) (May 1 through September 30)				Rate ($/cfs): $11,100
	Calendar Year				
AGENCY	2011	2012	2013	3-Year Peak	Calendar Year 2015 Capacity Charge
Anaheim	39.3	38.3	31.3	39.3	$436,230
Beverly Hills	31.5	32.7	30.8	32.7	$362,970
Burbank	21.4	20.9	19.7	21.4	$237,540
Calleguas	210.1	224.0	228.7	228.7	$2,538,570
Central Basin	79.2	74.5	73.6	79.2	$879,120
Compton	2.4	2.3	2.9	2.9	$32,190
Eastern	190.9	238.1	267.4	267.4	$2,968,140
Foothill	19.0	17.6	18.9	19.0	$210,900
Fullerton	27.4	24.4	20.0	27.4	$304,140
Glendale	49.0	41.5	44.9	49.0	$543,900
Inland Empire	138.0	126.7	153.9	153.9	$1,708,290
Las Virgenes	43.4	41.9	43.2	43.4	$481,740
Long Beach	59.9	60.4	66.9	66.9	$742,590
Los Angeles	329.0	512.9	767.1	767.1	$8,514,810
MWDOC	390.1	401.1	381.9	401.1	$4,452,210
Pasadena	50.6	52.1	52.5	52.5	$582,750
San Diego CWA	760.7	961.5	967.4	967.4	$10,738,140
San Fernando	1.6	2.8	4.9	4.9	$54,390
San Marino	1.3	5.3	6.1	6.1	$67,710
Santa Ana	20.0	19.2	19.6	20.0	$222,000
Santa Monica	21.1	19.7	22.7	22.7	$251,970
Three Valleys	122.7	133.0	178.6	178.6	$1,982,460
Torrance	35.5	36.2	34.1	36.2	$401,820
Upper San Gabriel	20.4	15.2	16.1	20.4	$226,440
West Basin	214.6	222.6	230.2	230.2	$2,555,220
Western MWD	179.3	193.5	198.6	198.6	$2,204,460
Total	**3,058.4**	**3,518.5**	**3,882.0**	**3,937.0**	**$43,700,700**

Totals may not foot due to rounding

Table 1

Option 2: Calendar Year 2015 Capacity Charge

	Peak Day Demand (cfs) (May 1 through September 30) Calendar Year				Rate ($/cfs): $10,900
AGENCY	2011	2012	2013	3-Year Peak	Calendar Year 2015 Capacity Charge
Anaheim	39.3	38.3	31.3	39.3	$428,370
Beverly Hills	31.5	32.7	30.8	32.7	$356,430
Burbank	21.4	20.9	19.7	21.4	$233,260
Calleguas	210.1	224.0	228.7	228.7	$2,492,830
Central Basin	79.2	74.5	73.6	79.2	$863,280
Compton	2.4	2.3	2.9	2.9	$31,610
Eastern	190.9	237.2	267.4	267.4	$2,914,660
Foothill	19.0	17.6	18.9	19.0	$207,100
Fullerton	27.4	24.4	20.0	27.4	$298,660
Glendale	49.0	41.5	44.9	49.0	$534,100
Inland Empire	138.0	126.7	153.9	153.9	$1,677,510
Las Virgenes	43.4	41.9	43.2	43.4	$473,060
Long Beach	59.9	60.4	66.9	66.9	$729,210
Los Angeles	329.0	512.9	767.1	767.1	$8,361,390
MWDOC	390.1	401.1	381.9	401.1	$4,371,990
Pasadena	50.6	52.1	52.5	52.5	$572,250
San Diego CWA	760.7	961.5	967.4	967.4	$10,544,660
San Fernando	1.6	2.8	4.9	4.9	$53,410
San Marino	1.3	5.3	6.1	6.1	$66,490
Santa Ana	20.0	19.2	19.6	20.0	$218,000
Santa Monica	21.1	19.7	22.7	22.7	$247,430
Three Valleys	122.7	133.0	178.6	178.6	$1,946,740
Torrance	35.5	36.2	34.1	36.2	$394,580
Upper San Gabriel	20.4	15.2	16.1	20.4	$222,360
West Basin	214.6	222.6	230.2	230.2	$2,509,180
Western MWD	179.3	193.7	198.6	198.6	$2,164,740
Total	**3,058.4**	**3,517.8**	**3,882.0**	**3,937.0**	**$42,913,300**

Totals may not foot due to rounding

Table 1

Option 3: Calendar Year 2015 Capacity Charge

	Peak Day Demand (cfs) (May 1 through September 30)				Rate ($/cfs): $11,000
	Calendar Year				
AGENCY	2011	2012	2013	3-Year Peak	Calendar Year 2015 Capacity Charge
Anaheim	39.3	38.3	31.3	39.3	$432,300
Beverly Hills	31.5	32.7	30.8	32.7	$359,700
Burbank	21.4	20.9	19.7	21.4	$235,400
Calleguas	210.1	224.0	228.7	228.7	$2,515,700
Central Basin	79.2	74.5	73.6	79.2	$871,200
Compton	2.4	2.3	2.9	2.9	$31,900
Eastern	190.9	237.2	267.4	267.4	$2,941,400
Foothill	19.0	17.6	18.9	19.0	$209,000
Fullerton	27.4	24.4	20.0	27.4	$301,400
Glendale	49.0	41.5	44.9	49.0	$539,000
Inland Empire	138.0	126.7	153.9	153.9	$1,692,900
Las Virgenes	43.4	41.9	43.2	43.4	$477,400
Long Beach	59.9	60.4	66.9	66.9	$735,900
Los Angeles	329.0	512.9	767.1	767.1	$8,438,100
MWDOC	390.1	401.1	381.9	401.1	$4,412,100
Pasadena	50.6	52.1	52.5	52.5	$577,500
San Diego CWA	760.7	961.5	967.4	967.4	$10,641,400
San Fernando	1.6	2.8	4.9	4.9	$53,900
San Marino	1.3	5.3	6.1	6.1	$67,100
Santa Ana	20.0	19.2	19.6	20.0	$220,000
Santa Monica	21.1	19.7	22.7	22.7	$249,700
Three Valleys	122.7	133.0	178.6	178.6	$1,964,600
Torrance	35.5	36.2	34.1	36.2	$398,200
Upper San Gabriel	20.4	15.2	16.1	20.4	$224,400
West Basin	214.6	222.6	230.2	230.2	$2,532,200
Western MWD	179.3	193.7	198.6	198.6	$2,184,600
Total	**3,058.4**	**3,517.8**	**3,882.0**	**3,937.0**	**$43,307,000**

Totals may not foot due to rounding

Section 7. That the capacity charge for each member public agency, the method of its calculation, cost allocations and other data used in its determination are as specified in the General Manager's recommendation on rates and charges to be effective January 1, 2015, and the corresponding cost of service report. Such recommendation and cost of service report are on file and available for review by interested parties at Metropolitan's headquarters.

Section 8. That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

Section 9. That this Board finds that the proposed capacity charge is not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

Section 10. That the General Manager is hereby authorized and directed to take all necessary action to satisfy relevant statutes requiring notice by publication.

Section 11. That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member public agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 8, 2014.

_____

Secretary of the Board of Directors
of The Metropolitan Water District
of Southern California