



- Board of Directors  
*Finance & Insurance Committee*

4/9/2019 Board Meeting

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8-1

## Subject

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Approve resolutions fixing and adopting a Readiness-to-Serve Charge and a Capacity Charge for calendar year 2020; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA

## Executive Summary

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This letter recommends approval of the resolutions to fix and adopt a Readiness-to-Serve (RTS) Charge and a Capacity Charge effective January 1, 2020, based on the budget, rates, and charges adopted by the Board on April 10, 2018.

## Details

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### Background

On April 10, 2018, Metropolitan's Board adopted its biennial budget for fiscal years (FYs) 2018/19 and 2019/20, rates for calendar years (CYs) 2019 and 2020, and charges for CY 2019. In meetings and workshops held from February through April 2018, Metropolitan's Board, the Finance and Insurance Committee of the Board, and Metropolitan's member agencies reviewed and evaluated the biennial budget and revenue requirements, and the rates and charges necessary to support the revenue requirements. A public hearing was held on March 13, 2018. All documents provided to the Board in connection with its April 2018 Board action were posted online, along with other supporting and background material, at: <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx> and <http://mwdh2o.com/WhoWeAre/Pages/FYs-2018-19-2019-20-proposed-property-tax-rates.aspx>. The documents remain available in support of the charges proposed in this letter.

The RTS Charge is set to recover capital costs of the portion of Metropolitan's system that is available to provide emergency storage and available capacity during outages and hydrologic variability. The Capacity Charge is set to recover peaking capacity costs on Metropolitan's distribution system. In adopting the biennial budget on April 10, 2018, the Board determined the amount of revenue to be raised by the RTS Charge and the Capacity Charge, collectively, would be \$163.9 million in CY 2019, and \$167.6 million in CY 2020. At that meeting, the Board approved the resolutions to adopt the RTS and Capacity Charges for CY 2019. Staff now proposes to the Board resolutions to adopt the RTS Charge (**Attachment 1**) and the Capacity Charge (**Attachment 2**) for CY 2020, at the amounts previously determined by the Board through its approval of the biennial budget, rates, and charges on April 10, 2018. The proposed resolutions provide an estimate of each member agency's share of the RTS and Capacity Charge in 2020 and include an Engineer's Report that also supports the continuation of the Standby Charge that some agencies have elected to use to pay their RTS Charge obligations. The continuation of the Standby Charge will be presented to the Board for consideration at its regular May meeting. The notice to member agencies of the proposed adoption of the RTS and Capacity Charges for 2020 and continuation of the Standby Charge for FY 2019/20 (**Attachment 3**) was provided to member agencies via email on February 6, 2019.

## Policy

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Metropolitan Water District Act Section 61: Ordinances, Resolutions and Orders

Metropolitan Water District Act Section 133: Fixing of Water Rates

Metropolitan Water District Act Section 134: Adequacy of Water Rates; Uniformity of Rates

Metropolitan Water District Act Section 134.5: Water Standby or Availability of Service Charge

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

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

By Minute Item 51163, dated April 10, 2018, the Board approved the biennial budget for fiscal years 2018/19 and 2019/20

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

## California Environmental Quality Act (CEQA)

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### CEQA determination for Option #1:

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 defined as a project under 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). Finally, where it can be seen with certainty that there is no possibility that the proposed action may have a significant impact on the environment, the action is not subject to CEQA pursuant to Section 15061(b)(3) of the State CEQA Guidelines.

### CEQA determination for Option #2:

None required.

## Board Options

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### Option #1

Approve resolutions fixing and adopting a Readiness-to-Serve Charge and a Capacity Charge for calendar year 2020.

**Fiscal Impact:** Revenues from fixed charges of \$166.5 million in calendar year 2020, which is slightly lower than the amount estimated in the adopted biennial budget for FYs 2018/19 and 2019/20 due to lower peaks than projected for the Capacity Charge.

**Business Analysis:** This option involves adoption of charges that result in fixed revenues of \$166.5 million from the RTS Charge and the Capacity Charge in calendar year 2020. Fixed revenues in an amount of \$167.6 million from these charges were reflected in the adopted biennial budget for FYs 2018/19 and 2019/20.

### Option #2

Do not approve resolutions fixing and adopting a Readiness-to-Serve Charge and a Capacity Charge for calendar year 2020. Direct staff to set a process to revisit FY 2019/20 of the biennial budget and the water rates for CY 2020 to address the resulting \$167.6 million deficit and report back on the proposed process to the Board at its regular May 2019 meeting.

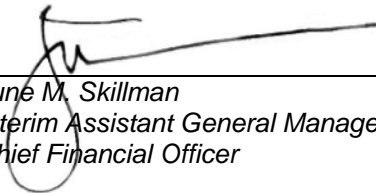
**Fiscal Impact:** Net revenue deficit will depend on any revised budget and water charges.

**Business Analysis:** This option would result in the loss of fixed revenues which were reflected in the adopted budget for FY 2019/20 and the water rates for CY 2020. Loss of the budgeted fixed revenue would require staff to revisit the current budget and water rates to ensure such rates will result in revenue which will pay the expenses of the district.

**Staff Recommendation**

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Option #1

  
\_\_\_\_\_  
June M. Skillman  
Interim Assistant General Manager/  
Chief Financial Officer

3/25/2019  
Date

  
\_\_\_\_\_  
Jeffrey Knightlinger  
General Manager

3/27/2019  
Date

**Attachment 1 – Resolution Fixing and Adopting a Readiness-to-Serve Charge Effective January 1, 2020**

**Attachment 2 – Resolution Fixing and Adopting a Capacity Charge Effective January 1, 2020**

**Attachment 3 – Notice to Member Agencies of Proposed Adoption of Readiness-to-Serve Charge and Capacity Charge for 2020 and Continuation of Standby Charge**

Ref# cfo12667760//

THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

RESOLUTION \_\_\_\_

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**RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE METROPOLITAN WATER DISTRICT OF  
SOUTHERN CALIFORNIA  
FIXING AND ADOPTING  
A READINESS-TO-SERVE CHARGE EFFECTIVE JANUARY 1, 2020**

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The Board of Directors of The Metropolitan Water District of Southern California (the "Board") hereby finds that:

1. Pursuant to Resolution 8774, the Board of The Metropolitan Water District of Southern California ("Metropolitan") approved a rate structure proposal at its meeting on October 16, 2001, described in Board Letter 9-6, including a Readiness-To-Serve ("RTS") Charge; and
2. Providing firm revenue sources is a goal of such rate structure; and
3. The amount of revenue to be raised by the RTS Charge shall be as determined by the Board and allocation of the RTS Charge among member public agencies ("member agencies") shall be in accordance with the method established by the Board; and
4. The RTS Charge is a charge fixed and adopted by Metropolitan and charged to its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and
5. Metropolitan has legal authority to fix and adopt such RTS Charge as a water rate pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the "Act"), and to fix it as an availability of service charge pursuant to Section 134.5 of the Act; and
6. 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
7. The RTS Charge recovers the capital expenditures for infrastructure projects needed to provide emergency storage capacity and available capacity needed to maintain reliable deliveries during outages and service interruptions and during periods of hydrologic variability; and
8. Pursuant to Resolution 8329, adopted by the Board on July 9, 1991 and Resolution 9199, adopted by the Board on March 8, 2016, and as each is thereafter amended and supplemented, proceeds of the RTS Charge and other revenues from the sale or availability of water are pledged to the payment of Metropolitan's outstanding revenue bonds and to the payment of Metropolitan's outstanding subordinate revenue bonds and to revenue bonds and subordinate bonds to be issued pursuant to Resolution 8329 and Resolution 9199; and

9. Under authority of Section 134.5 of the Act, an RTS Charge levied as an availability of service charge may be collected from the member agencies within Metropolitan, or may continue to be collected as a standby charge against individual parcels within Metropolitan's service area; and
10. Certain member agencies of Metropolitan have opted in prior fiscal years to provide collection of all or a portion of their RTS Charge obligation through a Metropolitan water standby charge ("Standby Charge") levied on parcels within those member agencies; and
11. Under authority of Section 134.5 of the Act, the Standby Charge may continue to be levied on each acre of land or each parcel of land less than an acre within Metropolitan to which water is made available for any purpose by Metropolitan, whether the water is actually used or not; and
12. Metropolitan is willing to comply with the requests of member agencies opting to have Metropolitan continue to levy the Standby Charge within their respective territories, on the terms and subject to the conditions contained herein; and
13. In *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, San Francisco Superior Court Case Nos. CPF-16-515282, CPG-17-563350, and CPF-18-516389 (the "2016, 2017, and 2018 Cases", collectively), the San Diego County Water Authority challenged Metropolitan's water charges adopted on April 12, 2016, April 11, 2017, and on April 10, 2018, respectively, and also challenged Metropolitan's rates. Metropolitan is defending such challenges; and
14. Metropolitan maintains that its rates and charges are appropriate. There is no final judgment in the identified cases and Metropolitan does not anticipate a final judgment in CY 2020; and
15. On April 10, 2018, the Board considered the rates and charges presented by the General Manager and approved the biennial budget for fiscal years 2018/19 and 2019/20 and adopted recommended water rates for calendar years 2019 and 2020 and charges for calendar year 2019, and received information and documents available at <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx> and <http://mwdh2o.com/WhoWeAre/Pages/FYs-2018-19-2019-20-proposed-property-tax-rates.aspx>; and
16. In approving the Proposed Biennial Budget and adopting the rates and charges on April 10, 2018, the Board determined the amount of revenue to be raised by the RTS Charge in calendar year 2020 to be \$136,000,000, based on information and documents available at <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx> and <http://mwdh2o.com/WhoWeAre/Pages/FYs-2018-19-2019-20-proposed-property-tax-rates.aspx>; and
17. Written notice of intention of Metropolitan's Board to consider and take action at its regular meeting of April 9, 2019, to adopt Metropolitan's RTS Charge for calendar year 2020 was given to each of Metropolitan's member agencies; and
18. The RTS Charge for calendar year 2020 applicable to each member agency is reflected in the Engineer's Report dated April 2019 and its method of its calculation and the specific data used in its determination are as specified in the updated cost of service report; and
19. 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 does hereby resolve, determine and order as follows:

**Section 1.** That the Board hereby fixes and adopts an RTS Charge for the period from January 1, 2020 through December 31, 2020.

**Section 2.** That said RTS Charge shall be in an amount sufficient to provide for payment of debt service not paid from *ad valorem* property taxes, and other appropriately allocated costs, for capital expenditures for infrastructure projects needed to provide emergency storage capacity and available capacity needed to maintain reliable deliveries during outages and service interruptions and during periods of hydrologic variability.

**Section 3.** That such RTS Charge for January 1, 2020 through and including December 31, 2020 shall be in the amounts specified in Section 4, which shall be determined on a historic basis for each acre-foot of water, excluding water sales of reclaimed water under the Local Projects Program, and Local Resources Program, groundwater under the Groundwater Recovery Program, and Local Resources Program, groundwater under the Groundwater Recovery Program and deliveries under Replenishment and Interim Agricultural Water, included in Metropolitan's average water deliveries to its member agencies for the applicable ten-year period identified in Section 4. The aggregate RTS Charge for the period from January 1, 2020 through and including December 31, 2020 shall also be as specified in Section 4.

**Section 4.** That the RTS Charge for January 1, 2020 through December 31, 2020 shall be allocated among the member agencies in proportion to the average of deliveries through Metropolitan's system (in acre-feet) to each member agency during the ten-year period ending June 30, 2018. Metropolitan sales of reclaimed water under the Local Projects Program, groundwater under the Groundwater Recovery Program, and deliveries under the Replenishment and Interim Agricultural Water Service Programs are not included in the RTS Charge water sales calculation. The allocation of the RTS Charge among member agencies is based on sales data recorded by Metropolitan and shall be conclusive in the absence of manifest error.

The amount of the RTS Charge to be charged to each member agency effective January 1, 2020, is as follows:

### Schedule 1

#### Calendar Year 2020 Readiness-To-Serve Charge

| Member Agency                             | Rolling Ten-Year<br>Average Firm Deliveries<br>(Acre-Feet) FY2008/09 -<br>FY2017/18 | RTS Share      | 12 months @ \$136<br>million per year<br>(1/20-12/20) |
|---|---|----------------|---|
| Anaheim                                   | 18,484.7  | 1.19%          | \$ 1,616,455  |
| Beverly Hills                             | 10,636.8  | 0.68%          | 930,169   |
| Burbank                                   | 12,505.3  | 0.80%          | 1,093,567   |
| Calleguas MWD                             | 100,327.3   | 6.45%          | 8,773,446   |
| Central Basin MWD                         | 45,375.1  | 2.92%          | 3,967,973   |
| Compton                                   | 1,052.6   | 0.07%          | 92,048  |
| Eastern MWD                               | 95,589.5  | 6.15%          | 8,359,134   |
| Foothill MWD                              | 8,761.7   | 0.56%          | 766,195   |
| Fullerton                                 | 8,520.9   | 0.55%          | 745,138   |
| Glendale                                  | 17,219.1  | 1.11%          | 1,505,780   |
| Inland Empire Utilities Agency            | 58,335.2  | 3.75%          | 5,101,311   |
| Las Virgenes MWD                          | 20,859.4  | 1.34%          | 1,824,118   |
| Long Beach                                | 31,074.3  | 2.00%          | 2,717,393   |
| Los Angeles                               | 298,801.6   | 19.21%         | 26,129,675  |
| Municipal Water District of Orange County | 214,227.5   | 13.77%         | 18,733,819  |
| Pasadena                                  | 19,306.1  | 1.24%          | 1,688,285   |
| San Diego County Water Authority          | 287,538.4   | 18.49%         | 25,144,728  |
| San Fernando                              | 35.7  | 0.00%          | 3,122   |
| San Marino                                | 854.7   | 0.05%          | 74,742  |
| Santa Ana                                 | 11,281.3  | 0.73%          | 986,530   |
| Santa Monica                              | 6,403.0   | 0.41%          | 559,931   |
| Three Valleys MWD                         | 62,968.2  | 4.05%          | 5,506,459   |
| Torrance                                  | 16,507.9  | 1.06%          | 1,443,587   |
| Upper San Gabriel Valley MWD              | 22,639.8  | 1.46%          | 1,979,811   |
| West Basin MWD                            | 116,023.0   | 7.46%          | 10,146,008  |
| Western MWD                               | 69,876.5  | 4.49%          | 6,110,577   |
| <b>MWD Total</b>                          | <b>1,555,205.6</b>  | <b>100.00%</b> | <b>\$ 136,000,000</b>                                 |

Totals may not foot due to rounding

The General Manager shall establish and make available to member public agencies procedures for administration of the readiness-to-serve charge, including filing and consideration of applications for reconsideration of their respective readiness-to-serve charge. The General Manager shall review any applications for reconsideration submitted in a timely manner. The General Manager shall also establish reasonable procedures for the filing of appeals from his determination.

**Section 5.** That the RTS Charge specified in Schedule 1, together with other revenues from Metropolitan's water rates, other charges, ad valorem property taxes, and other miscellaneous revenue, does not exceed the reasonable and necessary cost of providing Metropolitan's water service for which the rates and charges are made, or of conferring the benefit provided, and is fairly apportioned to each member agency as specified in Section 6 below.

**Section 6.** That water conveyed through Metropolitan's system for the purposes of water transfers, exchanges or other similar arrangements shall be included in the calculation of a member agency's rolling ten-year average firm demands used to allocate the RTS Charge.

**Section 7.** That the RTS Charge and the amount applicable to each member agency, the method of its calculation, and the specific data used in its determination are as specified in the adopted rates and charges to be

effective January 1, 2020, which forms the basis of the RTS Charge, and the corresponding 2018 Cost of Service Report. The adopted rates and charges and cost of service reports are on file and available for review by interested parties at Metropolitan's headquarters.

**Section 8.** That except as provided in Section 10 below with respect to any RTS Charge collected by means of the Standby Charge, the RTS Charge shall be due monthly, quarterly or semiannually as agreed upon by Metropolitan and the member agency.

**Section 9.** That such RTS Charge may, at the request of any member agency which elected to utilize the Standby Charge as a mechanism for collecting the RTS Charge obligation in fiscal year 1996/97, be collected by continuing the Standby Charge at rates not to exceed rates levied in fiscal year 1996/97 upon land within Metropolitan's (and such member agency's) service area to which water is made available by Metropolitan for any purpose, whether such water is used or not.

**Section 10.** That the Standby Charge shall be collected on the tax rolls, together with the *ad valorem* property taxes which are levied by Metropolitan for the payment of pre-1978 voter-approved indebtedness. Any amounts so collected shall be applied as a credit against the applicable member agency's RTS Charge obligation. After such member agency's RTS Charge allocation is fully satisfied, any additional collections shall be credited to other outstanding obligations of such member agency to Metropolitan that funds the capital costs or maintenance and operation expenses for Metropolitan's water system, or future RTS Charge obligations of such agency. Notwithstanding the provisions of Sections 8 and 9 above, any member agency requesting to have all or a portion of its RTS Charge obligation collected through Standby Charge levies within its territory as provided herein shall pay any portion not collected through net Standby Charge collections to Metropolitan within 50 days after Metropolitan issues an invoice for remaining RTS Charge obligations for such member agency, as provided in Administrative Code Section 4507.

**Section 11.** That notice is hereby given to the public and to each member 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 14, 2019 (or such other date as the Board shall hold its regular meeting in such month), on the General Manager's recommendation to continue the Standby Charge for fiscal year 2019/20 under authority of Section 134.5 of the Act on land within Metropolitan at rates not to exceed rates, per acre of land, or per parcel of land less than an acre, levied in fiscal year 1996/97 upon land within Metropolitan's (and such member agency's) service area. Such Standby Charge will be continued as a means of collecting the RTS Charge.

**Section 12.** That no failure to collect, and no delay in collecting, any Standby Charge shall excuse or delay payment of any portion of the RTS Charge when due.

**Section 13.** That the RTS Charge is fixed and adopted by Metropolitan as a rate or charge on its member agencies, and is not a fee or charge imposed upon real property or upon persons as incidents of property ownership, and the Standby Charge is collected within the respective territories of electing member agencies as a mechanism for collection of the RTS Charge. In the event that the Standby Charge, or any portion thereof, is determined to be an unauthorized or invalid fee, charge or assessment by a final judgment in any proceeding at law or in equity, which judgment is not subject to appeal, or if the collection of the Standby Charge shall be permanently enjoined and appeals of such injunction have been declined or exhausted, or if Metropolitan shall determine to rescind or revoke the Standby Charge, then no further Standby Charge shall be collected within any member agency and each member agency which has requested continuation of the Standby Charge as a means of collecting its RTS Charge obligation shall pay such RTS Charge obligation in full, as if continuation of such Standby Charge had never been sought.



**Section 14.** 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 15.** 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 16.** 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 17.** 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 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 9, 2019.

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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 EFFECTIVE JANUARY 1, 2020,  
INCLUDING LOCAL OPTION FOR STANDBY CHARGE,  
DURING FISCAL YEAR 2019/20**

**April 2019**

**BACKGROUND**

The Metropolitan Water District of Southern California is a public agency with a primary purpose to provide imported wholesale water service for domestic and municipal uses to its 26 member public agencies. More than 18 million people reside within Metropolitan's service area, which covers approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. Metropolitan historically provided between 40 and 60 percent of the water used within its service area. To supply Southern California with reliable and safe water, Metropolitan imports water from the Colorado River and Northern California to supplement its member agencies' local supplies, and helps its member agencies develop increased water conservation, recycling, storage and other local resource programs.

**REPORT PURPOSES**

As part of its role as a regional imported water supplier, Metropolitan builds capital facilities and implements water management programs that ensure the delivery of 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 continue to collect a portion of their RTS obligation through Metropolitan's Standby Charge in fiscal year 2019/20. **Because the Standby Charge is levied and collected on a fiscal year basis the calculations in this report also are for the fiscal year, even though the RTS Charge is levied on a calendar year basis.** The RTS Charge for calendar year 2019 was adopted by Metropolitan's Board on April 10, 2018 and the RTS Charge for 2020 will be considered by the Board on April 9, 2019. The Board will consider the continuation of the Standby Charge in fiscal year 2019/20 on May 14, 2019.

Metropolitan levies the RTS Charge on its member agencies to recover a portion of the capital costs including debt service on bonds issued to finance capital facilities needed to meet demands on Metropolitan's system for emergency storage and available capacity to meet outages and hydrologic variability. The Standby Charge is collected from parcels of land within Metropolitan's member agencies that have elected to collect all or a portion of their RTS obligation through the Standby Charge, as a method of recovering the costs of special benefits conferred on parcels within their service area. The RTS Charge will partially pay for the facilities and programs described in this report, namely, the amount attributable to the portions providing emergency storage and available capacity to meet outages and hydrologic variability. The Standby Charge, when collected, will be utilized solely for capital payments and debt service on the capital facilities funded by the RTS Charge, as identified in this report.

The budgeted total RTS revenue for fiscal year 2019/20 is \$134.5 million, of which \$43.7 million is estimated to be collected via the Standby Charge.

## **METROPOLITAN'S RESPONSE TO FLUCTUATING WATER DEMANDS AND AVAILABILITY OF WATER SOURCES**

Metropolitan's member agencies have widely differing imported water supply needs and the availability of imported water supply from various sources also varies widely. Some agencies have no local water resources and rely on Metropolitan for 100 percent of their annual water needs. Other agencies have adequate local surface supplies and storage and/or groundwater basins that provide them with the majority of their water supplies during wet and average years. However, during dry periods and/or based on a variety of other factors, these agencies rely on Metropolitan to make up any shortfalls in local water supplies. Similar coordination challenges arise in managing water available from Metropolitan's various water supply sources.

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 the region, Metropolitan continues to identify and develop additional water supplies to maintain the reliability of the imported water supply and delivery system to its member agencies. These efforts include the construction of capital facilities and implementation of demand management programs. The demand management programs offset the need to transport or store additional water into or within the Metropolitan service area, thus avoiding and deferring the need for additional infrastructure construction, operation, and maintenance, saving such costs; and free up capacity in the system.

### **CAPITAL FACILITIES — CONVEYANCE AND DISTRIBUTION**

Metropolitan's total water system has been built over time to meet the widely differing needs of its member agencies and the various sources of water available to Metropolitan. To meet those needs, Metropolitan's water delivery system is comprised of three basic conveyance and delivery components that form one integrated water system:

- State Water Project (SWP);
- Colorado River Aqueduct (CRA); and
- Distribution System

The system draws on diverse supply sources, transports water across a large part of the State and distributes water in six counties, where member agencies or their retail sub-agencies serve an estimated 18.9 million people. The CRA and the California Aqueduct of the SWP convey imported water into the Metropolitan service area. This water is then delivered to Metropolitan's member agencies via a regional network of canals, pipelines, and appurtenant facilities, which constitute the Distribution System. Supply, treatment, and storage facilities augment the Distribution System. The system is an interconnected regional conveyance and distribution system with the ability to deliver supplies from each of the SWP, the CRA, and its storage portfolio throughout its vast and diverse service area to almost every member agency. This flexibility derives from the capital facilities and provides local and system-wide benefits to all member agencies, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area.

As the 2007 Integrated Area Study (IAS) emphasized, regional system flexibility is a key component of overall reliability.<sup>1</sup> Metropolitan must maintain operational flexibility—the ability to respond to short-term changes in regional water supply, water quality, treatment requirements, and member agency demands. Metropolitan must maintain delivery flexibility—the ability to maintain partial to full water supply deliveries during planned and unplanned facility outages. Metropolitan is also required by state statute to serve as large an area as is determined to be reasonable and practical with SWP water; and where a blend of water sources is served, to have the objective to the extent determined to be reasonable and practical, that at least 50 percent of the blend be SWP water. (MWD Act, Sec. 136.)

Operational flexibility has been achieved by creating an interconnected regional delivery network integrating the SWP and the CRA conveyance systems with the Distribution System. This integrated network allows Metropolitan to incorporate supply from the SWP and the CRA with a diverse portfolio of geographically dispersed storage programs, including the Central Valley groundwater storage programs, carryover storage in San Luis Reservoir, flexible storage capacity in Castaic Lake and Lake Perris, Lake Mead storage, the Desert Water Agency/Coachella Valley Water District Advanced Delivery account, in-basin surface storage in Diamond Valley Lake and Lake Mathews, and in-basin groundwater Conjunctive Use Programs. This integrated, regional network also allows Metropolitan to move supplies throughout the system in response to service demands, supply availability and operational needs.

Therefore, each of Metropolitan's integrated conveyance, distribution and storage assets contributes to regional system reliability. It is fair and reasonable for member agencies and all property owners within the service area to share the cost of developing and maintaining these assets because they all benefit from regional system reliability.

#### State Water Project Description and Benefits

One of Metropolitan's two major sources of water is the SWP.<sup>2</sup> The SWP is the largest state-built, multipurpose, user-financed water project in the country. It was designed and built primarily to deliver water, but also provides flood control, generates power for pumping, is used for recreation, and enhances habitat for fish and wildlife.

The SWP consists of a complex system of dams, reservoirs, power plants, pumping plants, canals and aqueducts to deliver water. See Figure 1. SWP water consists of water from rainfall and snowmelt runoff that is captured and stored in SWP conservation facilities and then delivered through SWP transportation facilities to water agencies and districts located throughout the Upper Feather River, Bay Area, Central Valley, Central Coast, and Southern California. In addition to the delivery of SWP water, the SWP is also used to convey transfers of SWP water and non-SWP water. Metropolitan receives water from the SWP through the California Aqueduct, which is 444 miles long, and at four delivery points near the northern and eastern boundaries of Metropolitan's service area.

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<sup>1</sup> 2007 Integrated Area Study, Report No. 1317, pg. 2-10.

<sup>2</sup> For historical and current information regarding the SWP, refer to Bulletin 132, published periodically by DWR since 1963. The most recently published Bulletin is Bulletin 132-16 dated June 2017 and titled "Management of the California State Water Project."

**Figure 1. Facilities of the State Water Project**



The SWP is managed and operated by the Department of Water Resources (DWR). All water supply-related capital expenditures and operations, maintenance, power and replacement (OMP&R) costs associated with the SWP conservation and transportation facilities are paid for by 29 agencies and districts, known collectively as the State Water Contractors (Contractors). The Contractors are participants in the SWP through long-term contracts for the delivery of SWP water and use of the SWP transportation facilities.

In 1960, Metropolitan signed the first water supply contract (as amended, the State Water Contract) with DWR. In addition to SWP water, Metropolitan also obtains water from water transfers, groundwater banking and exchange programs delivered through the California Aqueduct.

Since 1960, the SWP system has been extended, improved, and refurbished. All such costs are payable by the Contractors. On October 10, 2017, Metropolitan's Board voted to support financing for the California WaterFix project. California WaterFix is a comprehensive science-based solution proposed by the state to modernize critical water delivery infrastructure of the SWP. At the time of the Metropolitan Board's approval, the project proposed construction of new water intakes in the north Delta and two 40-foot diameter tunnels under the Delta terminating at a forebay in the south Delta. The estimated cost of the project, at the time of Metropolitan Board's approval, was \$17 billion in 2017 dollars, with Metropolitan's share about 26% of that, or \$4.3 billion. Metropolitan's biennial budget for fiscal years 2018/19 and 2019/20 includes costs of \$4 million and \$13 million for each fiscal year, respectively. On July 10, 2018, the Metropolitan Board approved increased funding for up to about a 65% share of the project. The approved increased funding of the project was not included in the biennial budget for fiscal years 2018/19 and 2019/20 and is not included in the costs considered in this report.

All Metropolitan member agencies benefit from the SWP system and its supplies, which can be distributed to all member agencies. Metropolitan's member agencies distribute that water to parcels as retail water providers or as wholesale water providers to retail agencies. In this way, the SWP water that Metropolitan delivers to its member agencies contributes to water available to existing and future end users throughout Metropolitan's service area. The cost of the net capital payments for the SWP, with the costs of California WaterFix and less the portion covered by property taxes in fiscal year 2019/20 is \$40.6 million, as shown in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the SWP facilities and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$43.7 million of the total \$305.7 million system costs, representing 14% of the total system costs.

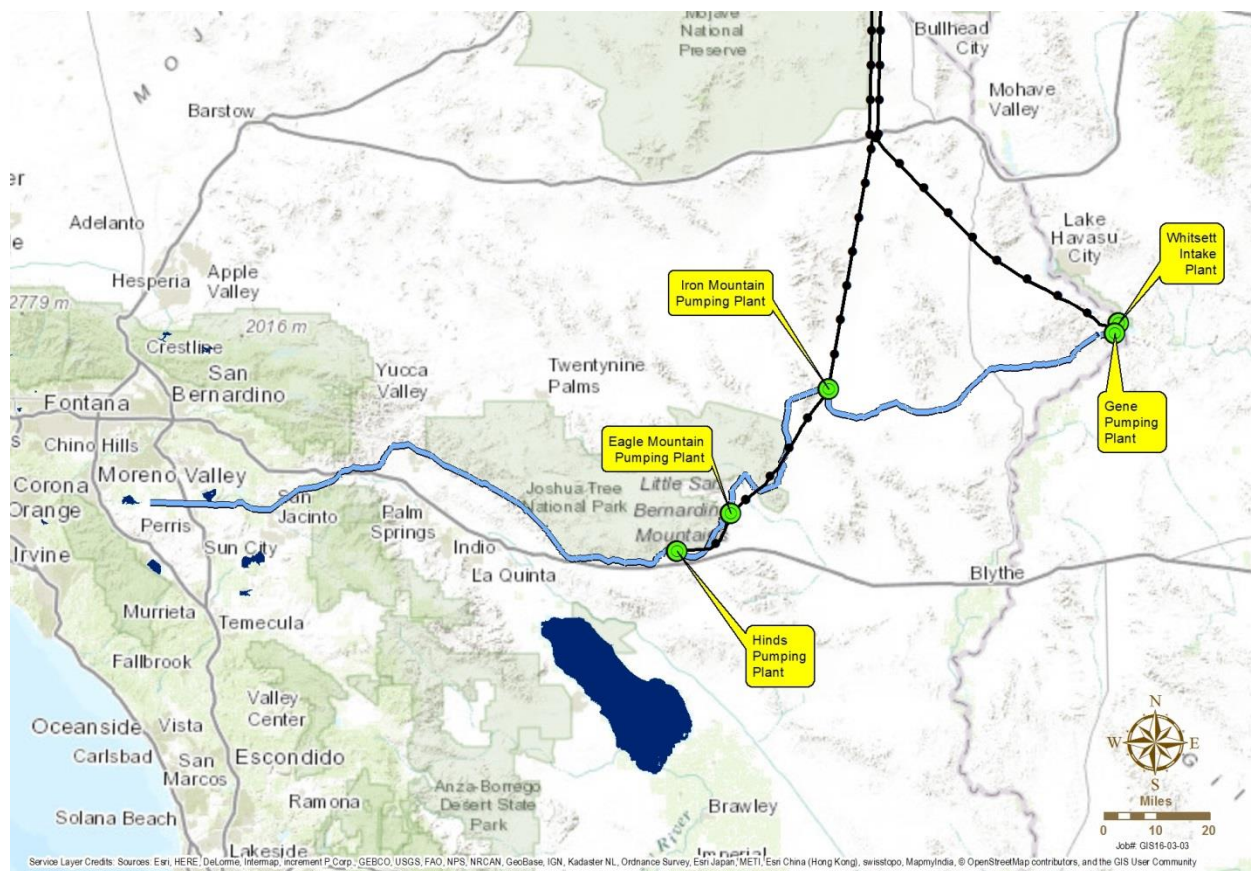
#### Colorado River Aqueduct Description and Benefits

Metropolitan's other major source of water is the CRA. Metropolitan was established to obtain an allotment of Colorado River water, and its first mission was to construct and operate the CRA. The CRA consists of five pumping plants, 450 miles of high voltage power lines, one electric substation, four regulating reservoirs, and 242 miles of aqueducts, siphons, canals, conduits and pipelines terminating at Lake Mathews in Riverside County. See Figure 2. Metropolitan owns, operates, and manages the Colorado River Aqueduct. Metropolitan is responsible for operating, maintaining, rehabilitating, and repairing the CRA, and is responsible for obtaining and scheduling energy resources adequate to power pumps at the CRA's five pumping stations.

Metropolitan incurs capital and operations and maintenance expenditures to support the CRA activities. The direct costs of the CRA activities include labor, materials and supplies, as well as outside services to provide repair and maintenance, and professional services. The CRA activities benefit from Water System Operations support services and management supervision, as well as Administrative and General activities of Metropolitan. Metropolitan finances past, current and future capital improvements on the CRA, and capitalizes those improvements as assets. The costs of Metropolitan's capital financing activities are apportioned to cost functions,

such as the CRA Conveyance and Aqueduct function. The capital cost of the Colorado River Aqueduct and Inland Feeder in fiscal year 2019/20 is \$82.7 million, and is included in the Non-SWP Conveyance System line item in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the CRA facilities and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$43.7 million of the total \$305.7 million system costs, representing 14% of the total system costs.

**Figure 2. Colorado River Aqueduct**



### Metropolitan's Conveyance and Distribution System Benefits

For purposes of this report, components of the conveyance system are considered to include only those major trunk facilities that transport water from primary supply sources to either regional storage facilities or feeder lines linked to the primary conveyance facilities. See Figure 3. For a list of Metropolitan's conveyance facilities within its service area, see Table 3. All other water transport facilities, including pipelines, feeders, laterals, canals and aqueducts, are considered to be distribution facilities. Distribution facilities can be further identified in that they generally have at least one connection to a member agency's local distribution system. For a list of Metropolitan's distribution facilities, see Table 3.

All water transport facilities not specifically identified as part of the regional conveyance system are considered to be distribution facilities (Distribution System). While conveyance and aqueduct system components are regional in nature and generally do not link directly to local agency distribution systems, Distribution System facilities do ultimately connect to local agency systems. As a result, these facilities rely on conveyance and aqueduct facilities to import water from regional supply sources. The Distribution System is a complex network of facilities which routes water from the CRA and SWP to the member agencies. Beginning at the terminal delivery points of the CRA and SWP, Metropolitan's Distribution System includes approximately 775 miles of pipelines, feeders, and canals. Distribution System operations are coordinated from the Operations Control Center in Eagle Rock. The control center plans, schedules, and balances daily water operations in response to member agency demands and the operational limits of the system as a whole. Metropolitan's storage and treatment facilities augment the Distribution System. Metropolitan operates and maintains separate untreated and treated distribution facilities.

**Figure 3. Metropolitan's Distribution and Storage Facilities**



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 2019/20 estimated conveyance and distribution system benefits. The capital cost of the Distribution System in fiscal year 2019/20 is \$78.6 million, and is included in the Distribution System line item in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the Distribution System and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$43.7 million of the total \$305.7 million system costs, representing 14% of the total system costs.

## **CAPITAL FACILITIES – WATER STORAGE**

### System Storage Benefits

The Metropolitan system, for purposes of meeting demands during times of shortage, regulating system flows, and ensuring system reliability in the event of a system outage, provides over 1,000,000 acre-feet of system storage capacity. Diamond Valley Lake provides 810,000 acre-feet of that storage capacity, effectively doubling Southern California's previous surface water storage capacity. Other existing imported water storage available to the region consists of Metropolitan's raw water reservoirs, a share of the SWP's raw water reservoirs in and near the service area, and the portion of the groundwater basins used for conjunctive-use storage.

Water stored in system storage during above average supply conditions (surplus) provides a reserve against shortages when supply sources are limited or disrupted. Water 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 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. The capital costs of water storage in fiscal year 2019/20 is \$103.8 and, as shown in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the storage capacity throughout the service area and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only \$43.7 million of the total \$305.7 million system costs, representing 14% of the total system costs.

## **DEMAND MANAGEMENT PROGRAMS**

Demand management programs include local water resource development programs and water conservation programs. These demand management programs incentivize the development of local water supplies and the conservation of water to reduce the reliance on the delivery of imported water. These programs are implemented after the service connection between Metropolitan and its member agencies and, as such, do not add any water to the quantity Metropolitan obtains from other sources or to Metropolitan's own supply. Rather, the effect of these downstream programs in terms of water supply is to produce or conserve a local supply of water for the local agencies. The financial effect for Metropolitan is to avoid and defer the need for additional infrastructure construction, operation, and maintenance, thus contributing to infrastructure savings for all users of the system. The programs also free up conveyance capacity in the system to the benefit of all system users.

Therefore, investments in demand side management programs like conservation, water recycling and groundwater recovery help to increase regional water supply reliability, reduce demands for imported water supplies, decrease the burden on the district's infrastructure and reduce system costs, and free up conveyance capacity to the benefit of all system users. The total budgeted costs of the demand management programs in fiscal year 2019/20 is \$85.8

million, but are not included in Table 1 for this report. Staff is currently reviewing the demand management costs to determine the most appropriate functionalization of those costs. Thus, the portion of the demand management program costs that should be functionalized as conveyance, storage, and distribution infrastructure costs for purposes of Table 1 has not yet been determined. However, even without such costs, Metropolitan's infrastructure costs exceed the revenue collected pursuant to the RTS Charge.

### Local Resources Program Benefits

In 1982, Metropolitan's Board adopted the Local Resources Program (LRP) with the goal of developing local water resources in a cost-efficient manner. Financial incentives are provided to member agency-sponsored projects that best help the region achieve its local resource production goals of restoring degraded groundwater resources for potable use as well as developing recycled water and seawater desalination supplies. These projects provide new water supplies within Metropolitan's service area, which, as explained, help to increase regional water supply reliability, reduce demands for imported water supplies, decrease the burden on the district's infrastructure and reduce system costs, and free up conveyance capacity to the benefit of all system users.

In 1999, the California Legislature and Governor recognized the regional benefit of demand management programs by enacting Senate Bill 60, which states: "It is the intent of the Legislature that the Metropolitan Water District of Southern California expand water conservation, water recycling, and groundwater recovery efforts" and "The Metropolitan Water District of Southern California shall place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures." (MWD Act, Sec. 130.5.)

Combined production from participating recycling and groundwater recovery projects produced approximately 215,000 acre-feet of water in fiscal year 2017/18 with financial incentive payments of about \$33 million. Regional recycling, recovered groundwater, and desalinated seawater production are projected to be about 660,000 acre-feet per year, by year 2025. An estimate of the costs of the program in fiscal year 2019/20 as measured by Metropolitan's estimated incentive payments for recycling and groundwater recovery projects is shown in Table 2.

### Water Conservation Benefits

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 increase imported supplies and offset the need to transport or store additional water into or within the Metropolitan service area. Through the Conservation Credits Program, Metropolitan provides financial incentives in regional conservation programs and also reimburses local agencies for a share of their costs of implementing their own conservation programs. Since fiscal year 1990/91, Metropolitan has spent over \$782 million in financial incentives to support regional and local conservation projects.

The actual conservation of water takes place at the retail consumer level. Regional conservation approaches have proven to be effective at reaching retail consumers throughout the service area and successfully implementing water saving devices, programs and practices. Regional investments in demand management programs, of which conservation is a key part along with local supply programs, benefit all member agencies regardless of project location. These programs help to increase regional water supply reliability, reduce demands for imported water supplies, decrease the burden on the district's infrastructure and reduce system costs, and free up conveyance capacity to the benefit of all system users. Thus, water conservation, as a demand management program, contributes to transportation infrastructure savings for all users of the regional water system.

Through fiscal year 2017/18, Metropolitan's Conservation Credits Program has saved over 2,848,000 acre-feet since inception. In order to comply with the Governor's mandate of reducing demand by 20 percent by the year 2020, Metropolitan has continued to increase its conservation efforts to meet that mandate.

In 1999, the California Legislature and Governor recognized the regional benefit of conservation, as well as local supply development, by enacting Senate Bill 60 which states: “It is the intent of the Legislature that the Metropolitan Water District of Southern California expand water conservation, water recycling, and groundwater recovery efforts” and “The Metropolitan Water District of Southern California shall place increased emphasis on sustainable, environmentally sound, and cost-effective water conservation, recycling, and groundwater storage and replenishment measures.” (MWD Act, Sec. 130.5.) An estimate of the costs of water conservation programs as measured by Metropolitan’s incentive payments is given in Table 2.

### **METROPOLITAN’S REVENUE**

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 to its member agencies, 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. However, the use of water rates as a primary source of revenue has placed an increasing burden on ratepayers, which would more equitably continue to be paid in part by assessments on land that in part derives its value from the availability of water through an integrated and reliable water system.

#### **Readiness-To-Serve**

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, which in 1995 certain member agencies opted to pay in part pursuant to the collection of a standby charge. In October 2001, the Board adopted the current unbundled rate structure, and maintained the RTS Charge.

As noted above, Metropolitan levies the RTS Charge on its member agencies to recover capital costs, including a portion of the debt service on bonds issued to finance capital facilities needed to meet existing demands on Metropolitan’s system for emergency storage and available capacity.

The estimated fiscal year 2019/20 RTS Charge for each member agency is shown in Table 4.

#### **Standby Charge Option**

Metropolitan’s Standby Charge is authorized by the State Legislature and has been levied by Metropolitan since fiscal year 1992/93. The Standby Charge recognizes that there are economic benefits to lands that have access to a water supply, whether or not such lands are using it, which excludes lands permanently committed to open space and maintained in their natural state that are not now and will not in the future be supplied water and lands that the General Manager, in his discretion, finds do not now and cannot reasonably be expected to derive a benefit from the projects to which the proceeds of the Standby Charge will be applied. Utilization of the Standby Charge transfers some of the burden of maintaining Metropolitan’s capital infrastructure from water rates and *ad valorem* taxes to all the benefiting properties within the service area. A fraction of the value of this benefit and of the cost of providing it can be effectively recovered, in part, through the levying of a standby charge. The projects to be supported in part by the Standby Charge are capital projects that provide both local and Metropolitan-wide benefit to current landowners as well as existing water users.

Although a standby charge could have been set to recover all Conveyance, Distribution, and Storage costs as detailed in Table 1, Metropolitan’s continued Standby Charge only collects about 14% of those costs. For fiscal year 2019/20, the amount to be recovered by the RTS Charge is estimated to be \$134.5 million and of that only \$43.7 million is estimated to be recovered by the Standby Charge.

The Standby Charge for each acre or parcel of less than an acre varies from member agency to member agency, as permitted under the legislation establishing Metropolitan's Standby Charge. The water Standby Charge for each member agency is continued at amounts not to exceed the rates in place since fiscal year 1996/97 and is shown in Table 5, which consists of composite rates by member agencies, not to exceed \$15.00. The composite rates consist in part of a uniform component of \$5 applicable throughout Metropolitan, and in part of a variable component, not exceeding \$10 in any member public agency, reflecting the allocation of historical water deliveries by the member agencies as of fiscal year 1993/94 when the composite rates were initially established. Metropolitan will continue Standby Charges only within the service areas of the member agencies that have requested that the standby charge be utilized for purposes of meeting their outstanding RTS obligation.

The proposed Standby Charge includes the continuation of water standby charges on: (1) parcels on which water standby charges have been levied in fiscal year 1996/97 and annually thereafter and (2) parcels annexed to Metropolitan and to an electing member agency after January 1997. Table 6 lists parcels annexed, or to be annexed, to Metropolitan and to electing member agencies during fiscal year 2017/18, such parcels being subject to the Standby Charge upon annexation.

The estimated costs of Metropolitan's wholesale water system, which could be paid by a Standby Charge, exceed \$305 million for fiscal year 2019/20, as shown in Table 1. An average total Standby Charge of about \$71.32 per acre of land or per parcel of land 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's service area, as Metropolitan delivers water to member agencies that contributes to water available to these properties, via that member agency or a retail sub-agency. Because Metropolitan's water deliveries to member agencies contributes to water available only to properties located within Metropolitan's service area boundaries (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 area is merely incidental.

Table 5 shows that the distribution of Standby Charge revenues from the various member agency service areas would provide net revenue flow of approximately \$43.7 million for fiscal year 2019/20. Metropolitan will use other revenue sources, such as water sales revenues, RTS Charge revenues (except to the extent collected through standby charges, as described above), interest income, and revenue from sales of hydroelectric power, to pay for the remaining program benefits. Additionally, the actual Standby Charge proposed to be continued ranges from \$5 to \$15 per acre of land or per parcel of land less than one acre. Thus, the benefits of Metropolitan's investments in water conveyance, storage, distribution, and demand management programs far exceed the recommended Standby Charge.

## **Equity**

The RTS Charge is a firm revenue source. The revenues to be collected through this charge will not vary with sales in the current year. This charge is levied on Metropolitan's member agencies and is not a fee or charge upon real property or upon persons as an incident of property ownership. It ensures that agencies that only occasionally purchase water from Metropolitan but receive the reliability benefits of Metropolitan's system pay an equitable share of the costs to provide that reliability. Within member agencies that elect to pay the RTS Charge through Metropolitan's standby charges, the Standby Charge results in a lower RTS Charge 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 system increases the availability and reliable delivery of water throughout Metropolitan's service area. A reliable system benefits existing end users and land uses through retail water service provided by Metropolitan member agencies or by water retailers that purchase water from a Metropolitan member agency, 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 resources from the SWP, CRA, Storage, 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 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 Storage and the conveyance and distribution facilities, demand management programs increase the future reliability of water resources. In addition, demand management programs provide system-wide benefits by decreasing the demand for imported water, which helps to decrease the burden on the district's infrastructure and reduce system costs, and free up conveyance capacity to the benefit of all system users. 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 its member agencies.

### SUMMARY

The foregoing and the attached tables describe the current costs of Metropolitan's system and benefits provided by the projects listed as mainstays to the water system for Metropolitan's service area. Benefits are provided to member agencies, their retail sub-agencies, 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 calendar year 2020, that the Metropolitan Board of Directors adopt the RTS Charge as set forth in Table 4 with an option for local agencies to request that a Standby Charge be collected for fiscal year 2019/20 from lands within Metropolitan's service area as a credit against such member agency's RTS Charge, up to the Standby Charge amounts collected by Metropolitan within the applicable member agency for fiscal year 1996/97. The maximum Standby Charge would not exceed \$15 per acre of land or per parcel of less than one acre. The recommended Standby Charge exceeds the costs of the system described in this Engineer's Report by at least \$262 million. A preliminary listing of all parcels subject to the proposed 2019/20 Standby Charge and the amounts proposed to be continued for each is available in the office of the Chief Financial Officer. A final listing is available upon receipt of final information from each county.

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**TABLE 1**  
**ESTIMATED COSTS OF**  
**WATER SYSTEM INFRASTRUCTURE**  
**BENEFITING REAL PROPERTY WITHIN METROPOLITAN'S SERVICE AREA**

|  | Estimated Program<br>Costs for FY2019/20 | Dollars Per Parcel<br>of 1 Acre or Less |
|--|--|---|
| <b>Capital Payments for Water System Infrastructure</b>  |  |   |
| Net Capital Payments to State Water Project (SWP)<br>(less portion paid by property taxes)   | \$ 40,551,723                            | \$9.46                                  |
| Non Tax Supported Capital Costs for Non-SWP Conveyance System <sup>1</sup>   | \$ 82,714,645                            | \$19.30                                 |
| Non Tax Supported Capital Costs for Distribution System <sup>2</sup>   | \$ 78,607,619                            | \$18.34                                 |
| Non Tax Supported Capital Costs for Water Storage <sup>3</sup>   | \$ 103,827,447                           | \$24.22                                 |
| <b>Total Capital Payments</b>  | <b>\$ 305,701,433</b>                    | <b>\$71.32</b>                          |
| <b>Estimated Standby Charge Revenues</b>   | <b>\$ 43,655,439</b>                     | <b>\$10.19</b>                          |
| Percent Collected by Standby Charge  | 14%                                      |   |
| <b>Total Remaining Costs Not Paid by Standby Charge</b>  | <b>\$ 262,045,993</b>                    | <b>\$61.14</b>                          |
| <b>Notes:</b>  |  |   |
| [1] Non-SWP Conveyance include the Colorado River Aqueduct and Inland Feeder.  |  |   |
| [2] Distribution facilities include the pipelines, laterals, feeders and canals that distribute water throughout the service area.                                       |  |   |
| [3] System storage includes Diamond Valley Lake, Lake Mathews, Lake Skinner and several other smaller surface reservoirs which provide storage for operational purposes. |  |   |
| Totals may not foot due to rounding  |  |   |

| <b>TABLE 2</b>  |  |
|---|--|
| <b>WATER RECYCLING, GROUNDWATER RECOVERY<br/>AND CONSERVATION PROJECTS</b>                      |  |
| <b>Project Name</b>   | <b>FISCAL YEAR 2019/20<br/>Payment</b> |
| <b>Water Recycling Projects</b>   | <b>\$28,105,464</b>                    |
| Alamitos Barrier Reclaimed Water Project  |  |
| Anaheim Water Recycling Demonstration Project   |  |
| Burbank Reclaimed Water System Expansion Project  |  |
| Burbank Recycled Water System Expansion Phase II Project  |  |
| Capistrano Valley Non Domestic Water System Expansion   |  |
| Century / Rio Hondo Water Recycling Program   |  |
| Development of Non-Domestic Water System in Ladera Ranch and Talega Valley                      |  |
| Direct Reuse Project Phase IIA  |  |
| Dry Weather Runoff Reclamation Facility   |  |
| Eastern Recycled Water Pipeline Reach 16 Project  |  |
| El Toro Phase II Recycled Water Distribution System Expansion Project                           |  |
| El Toro Recycled Water System Expansion   |  |
| Elsinore Valley Recycled Water Program  |  |
| EMWD Recycled Water System Expansion Project  |  |
| Encina Basin Water Reclamation Project Phases 1 and 2   |  |
| Escondido Regional Reclaimed Water Project  |  |
| Glendale Verdugo-Scholl and Brand Park Project  |  |
| Griffith Park South Water Recycling Project   |  |
| Groundwater Reliability Improvement Program Recycled Water Project                              |  |
| Groundwater Replenishment System Project  |  |
| Hansen Area Water Recycling Phase I Project   |  |
| Hansen Dam Golf Course Water Recycling Project  |  |
| Harbor Water Recycling Project  |  |
| Lake Mission Viejo Advanced Purification WTF  |  |
| Leo J. Vander Lans Water Treatment Facility Expansion Project                                   |  |
| Long Beach Reclaimed Water Master Plan Phase I System Expansion                                 |  |
| Los Angeles Taylor Yard Park Water Recycling Project  |  |
| Michelson/Los Alisos Water Reclamation Plant Upgrades and Distribution System Expansion Project |  |
| Moulton Niguel Water Reclamation System   |  |
| North Atwater Area Water Recycling Project  |  |
| North City Water Reclamation Project  |  |
| North Hollywood Area Water Recycling Project  |  |
| Olivenhain Recycled Project - Southeast Quadrant  |  |
| Otay Recycled Water System  |  |
| Oxnard Advanced Water Purification Facility Project   |  |

| <b>TABLE 2 (Continued)</b>   |  |
|--|--|
| <b>WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS</b>                       |  |
| <b>Project Name</b>  | <b>FISCAL YEAR 2019/20<br/>Payment</b> |
| <b>Water Recycling Projects (continued)</b>  |  |
| Padre Dam MWD Reclaimed Water System Phase I   |  |
| Rancho California Reclamation Expansion Project  |  |
| Rowland Water District Portion of the City of Industry Regional Recycled Water Project       |  |
| San Clemente Recycled Water System Expansion Project   |  |
| San Elijo Water Reclamation System   |  |
| San Pasqual Water Reclamation Project, Phase I   |  |
| Santa Maria Water Reclamation Project  |  |
| Sepulveda Basin Sports Complex Water Recycling Project                                       |  |
| Sepulveda Basin Water Recycling Project - Phase 4  |  |
| Terminal Island Recycled Water Expansion Project   |  |
| USGVMWD Portion of the City of Industry Regional Recycled Water Project                      |  |
| Van Nuys Area Water Recycling Project  |  |
| Walnut Valley Water District Portion of the City of Industry Regional Recycled Water Project |  |
| West Basin Water Reclamation Program   |  |
| West Basin Water Recycling Program Phase V Project   |  |
| Westside Area Water Recycling Project  |  |



| <b>TABLE 2 (Continued)</b>   |  |
|--|--|
| <b>WATER RECYCLING, GROUNDWATER RECOVERY<br/>AND CONSERVATION PROJECTS</b> |  |
| <b>Project Name</b>  | <b>FISCAL YEAR 2019/20<br/>Payment</b> |
| <b>Groundwater Recovery Projects</b>                                       | <b>\$9,719,860</b>                     |
| Beverly Hills Desalter Project   |  |
| Cal Poly Pomona Water Treatment Plant                                      |  |
| Capistrano Beach Desalter Project  |  |
| Chino Basin Desalination Program / IEUA                                    |  |
| Chino Basin Desalination Program / Western                                 |  |
| Colored Water Treatment Facility Project                                   |  |
| Irvine Desalter Project  |  |
| IRWD Wells 21 & 22 Desalter Project  |  |
| Madrona Desalination Facility (Goldsworthy Desalter) Project               |  |
| Menifee Basin Desalter Project   |  |
| Perris II Brackish Groundwater Desalter                                    |  |
| Pomona Well #37-Harrison Well Groundwater Treatment Project                |  |
| Round Mountain Water Treatment Plant                                       |  |
| San Juan Basin Desalter Project  |  |
| Temescal Basin Desalting Facility Project                                  |  |
| <b>On-site Retrofit Program</b>  | <b>\$3,000,000</b>                     |
| <b>Future Supply Actions</b>   | <b>\$1,985,000</b>                     |
| <b>Conservation Projects</b>   | <b>\$43,000,000</b>                    |
| Regionwide Residential   |  |
| Regionwide Commercial  |  |
| Member Agency Administered/MWD Funded                                      |  |
| Water Incentive Savings Program  |  |
| California Friendly Landscape Training Classes                             |  |
| Turf Removal Training Classes  |  |
| Landscape Irrigation Surveys   |  |
| Pilot programs/Studies   |  |
| Inspections  |  |
| Landscape Transformation Program (Turf Removal)                            |  |
| Disadvantaged Communities Program  |  |
| <b>Total Demand Management Programs</b>                                    | <b>\$85,810,324</b>                    |

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Storage Facilities**

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)  
 DAM SEISMIC ASSESSMENT - PHASE 3  
 DAM SEISMIC UPGRADES - PHASE 3  
 DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADE  
 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 EAST DAM POWER LINE REALIGNMENT  
 DVL INLET/OUTLET FISH SCREEN REHABILITATION  
 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

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description****Storage Facilities**

DVL, WORK PACKAGE 31, GEOGRAPHICAL INFO  
DVL, WORK PACKAGE 32, PERMIT  
DVL, WORK PACKAGE 33, MAJOR EQUIPMENT, VALVES  
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  
GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER (RETIREMENT)  
GARVEY RESERVOIR - JUNCTION STRUCTURE, REPLACE VALVE # 1  
GARVEY RESERVOIR COVER AND LINER REPLACEMENT PROJECT  
GARVEY RESERVOIR DRAINAGE & EROSION CONTROL IMPROVEMENTS  
GARVEY RESERVOIR- EMERGENCY GENERATOR  
GARVEY RESERVOIR- FLOATING COVER  
GARVEY RESERVOIR HYPOCHLORITE FEED SYSTEM  
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  
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  
JENSEN FINISHED WATER RESERVOIR NO. 1 COVER REHABILITATION  
JENSEN FINISHED WATER RESERVOIR NO. 2 FLOATING COVER IMPROVEMENT  
JENSEN FWR # 2 FLOATING COVER REPLACEMENT  
JENSEN, REPAIR COVER OVER RESERVOIR 1  
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 DAM SPILLWAY ASSESSMENT  
LAKE MATHEWS DIKE  
LAKE MATHEWS DIVERSION TUNNEL  
LAKE MATHEWS DIVERSION TUNNEL WALKWAY REPAIR  
LAKE MATHEWS- DOCK AND BOAT SHELTER  
LAKE MATHEWS DOMESTIC FACILITIES

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description****Storage Facilities**

LAKE MATHEWS- DOMESTIC WATER SYSTEM  
 LAKE MATHEWS- ELECTRICAL SYSTEM IMPROVEMENT  
 LAKE MATHEWS- EMERGENCY GENERATOR  
 LAKE MATHEWS ENLARGEMENT (SPEC NO. 505)  
 LAKE MATHEWS FOREBAY OUTLET STRCTR-REPL. CONCRETE BLOCK BLDG  
 LAKE MATHEWS FOREBAY OUTLET, CONCRETE BLDG  
 LAKE MATHEWS FOREBAY- REPLACE FOOTBRIDGE  
 LAKE MATHEWS FOREBAY WALKWAY REPAIRS  
 LAKE MATHEWS FOREBAY, HEADWORK FACILITY AND EQUIPMENT UPGRADE  
 LAKE MATHEWS HEADWORKS-INSTALL AIR MTRS,3 HOWELL BNGR VALVE OP.  
 LAKE MATHEWS- HOUSE AND GARAGE  
 LAKE MATHEWS I/O TOWER EMERGENCY GENERATOR  
 LAKE MATHEWS- IMPROVE MAIN SUBSTATION  
 LAKE MATHEWS- IMPROVEMENT OF DOMESTIC WATER & FIRE PROT. SYSTEM  
 LAKE MATHEWS -LUMBER STORAGE BUILDING  
 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 - INTEREST  
 LAKE MATHEWS- SEEPAGE ALARMS  
 LAKE MATHEWS- SEEPAGE ALARMS - INTEREST  
 LAKE MATHEWS- SPRAY PAINT BOOTH  
 LAKE MATHEWS WATERSHED, DRAINAGE  
 LAKE MATHEWS WATERSHED, DRAINAGE WATER QUALITY MGMT PLAN (CAJALCO CREEK DAM)  
 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 OUTLET TOWER SEISMIC ASSESSMENT  
 LAKE SKINNER- PROPANE STORAGE TANK  
 LAKE SKINNER- PROPANE STORAGE TANK - INTEREST  
 LIVE OAK RESERVOIR & RESERVOIR BYPASS SCHEDULE 264A  
 LIVE OAK RESERVOIR REHABILITATION  
 LIVE OAK RESERVOIR SURFACE REPAIR  
 MAINTENANCE FACILITIES, 75KVA TRANSFORMER SERVICE-LAKE MATHEWS (ORG CONST)  
 MILLS FINISHED WATER RESERVOIR REHABILITATION  
 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 EMERGENCY 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

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Storage Facilities**

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 COVER REPLACEMENT  
 PALOS VERDES RESERVOIR- FENCING AROUND  
 PALOS VERDES RESERVOIR- REPLACE DOMESTIC WATER SYSTEM PIPING  
 PALOS VERDES RESERVOIR SODIUM HYPOCHLORITE FEED SYSTEM UPGRADE  
 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 FEASIBILITY STUDY  
 PAMO RESERVOIR- WATER STORAGE FEASIBILITY STUDY- INTEREST  
 PV RESERVOIR GROUNDWATER MANAGEMENT  
 RECORD DRAWING RESTORATION PROGRAM, CRA  
 REPAIRS TO AZUSA CONDUIT  
 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  
 SKINNER DAM SPILLWAY ASSESSMENT  
 TEMPORARY EMPLOYEE LABOR SETTLEMENT  
 VALVE - GENE RESERVOIR (REPLACED 201)  
 VALVE STRUCTURE MODIFICATIONS-UPPER FDR, SAN GABRIEL CROSSING (INTERIM CONST)  
 WADSWORTH PUMP PLANT CONDUIT PROTECTION  
 WADSWORTH PUMP PLANT, PUMP MOTOR CONVERSION  
 WATER QUALITY PROJECT UPSTREAM  
 WATER SUPPLY SYSTEM, OPERATING TOWER, LAKE MATHEWS  
 WEYMOUTH FINISHED WATER RESERVOIR GATE REPLACEMENT

**Sub-total Storage facilities costs**

**103,827,447**

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description****Conveyance and Aqueduct Facilities**

2.4 KV STANBY DIESEL ENGINE GENERATOR REPLACEMENT - GENE  
 2.4 KV STANBY DIESEL ENGINE GENERATOR REPLACEMENT - INTAKE  
 2.4 KV STANBY DIESEL ENGINE GENERATOR REPLACEMENT - IRON  
 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  
 AUXILIARY POWER SYSTEM REHABILITATION/UPGRADES  
 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 AND GENE WASH RESERVOIRS DISCHARGE VALVE REHABILITATION  
 COPPER BASIN INTERIM CHLORINATION SYSTEM  
 COPPER BASIN OUTLET GATES RELIABILITY  
 COPPER BASIN OUTLET REHABILITATION  
 COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH DAM SLUICWAYS REHABILITATION  
 COPPER BASIN POWER & PHONE LINES REPLACEMENT  
 COPPER BASIN RESERVOIR OUTLET STRUCTURE REHABILITATION PROJECT  
 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 SLUICWAYS REHABILITATION  
 CRA - COPPER BASIN POWER & PHONE LINES REPLACEMENT  
 CRA - CUT & 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 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

**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description****Conveyance and Aqueduct Facilities**

CRA - IRON MOUNTAIN RESERVOIR AND CANAL LINER REPAIRS  
 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  
 CRA - PUMPING PLANTS VULNERABILITY ASSESSMENT  
 CRA - PUMPING WELL CONVERSION  
 CRA - QUAGGA MUSSEL BARRIERS  
 CRA - REAL PROPERTY - BOUNDARY SURVEYS  
 CRA - RELIABILITY PROGRAM 230 KV & 69 KV DISCONNECTS REPLACEMENT STUDY ( 5 PLANTS)  
 CRA - RELIABILITY PROGRAM INVESTIGATION  
 CRA - RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568  
 CRA - RELIABILITY PHASE II CONTINGENCY  
 CRA - 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 230 KV TRANSMISSION SYSTEM REGULATORY AND OPERATIONAL FLEXIBILITY UPGRADES  
 CRA 230KV & 69KV PROTECTION PANEL UPGRADE  
 CRA 6.9 KV LEAD JACKETED CABLES  
 CRA 6.9 KV POWER CABLES REPLACEMENT  
 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 CONDUIT STRUCTURAL PROTECTION  
 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 DELIVERY LINE REHABILITATION  
 CRA DESERT AIRFIELDS IMPROVEMENT  
 CRA DESERT REGION SECURITY IMPROVEMENTS  
 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 AND 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 DISCHARGE LINE ISOLATION BULHEAD COUPLINGS  
 CRA MAIN PUMPING PLANTS LUBRICATION SYSTEM  
 CRA MAIN PUMPING PLANTS SERVICE WATER & SAND REMOVAL SYSTEM  
 CRA MAIN TRANSFORMER REPLACEMENT /REHABILITATION  
 CRA MAIN TRANSFORMER REPLACEMENT/REHAB.  
 CRA MILE 12 POWER LINE & FLOW MONITORING EQUIP. STUDY  
 CRA OVER-CURRENT RELAY REPLACEMENT  
 CRA PROTECTIVE SLABS  
 CRA PUMP PLANT FLOW METER REPLACEMENT  
 CRA PUMP PLANT FLOW METER UPGRADE  
 CRA PUMP PLANT SUMP PIPING REPLACEMENT STUDY  
 CRA PUMP PLANT SUMP SYSTEM REHABILITATION  
 CRA PUMP PLANT UNINTERRUPTABLE POWER STUDY (UPS) UPGRADE  
 CRA PUMP PLANTS 2.3KV AND 480V SWITCH RACK REHABILITATION  
 CRA PUMP PLANTS 2300KV & 480 V SWITCHRACK REHAB  
 CRA PUMP WELLS CONVERSION AND BLOW-OFF REPAIR  
 CRA PUMPING PLANT DELIVERY LINE REHABILITATION  
 CRA PUMPING PLANT REHABILITATION STUDY  
 CRA PUMPING PLANT REHABILITATION STUDY AND INVESTIGATION  
 CRA PUMPING PLANT RELIABILITY PROGRAM - HIGH PRESSURE COMPRESSOR REPLACEMENT  
 CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY  
 CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION AND DISCHARGE LINES-EXPANSION JOINT REPAIRS

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description****Conveyance and Aqueduct Facilities**

CRA PUMPING PLANT STORAGE BUILDINGS AT HINDS, EAGLE MOUNTAIN AND IRON MOUNTAIN  
 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 RELIABILITY 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  
 CRA SERVICE CONNECTION DWCV-4 VALVES REPLACEMENT  
 CRA SIPHON REHAB  
 CRA SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS  
 CRA SURGE CHAMBER DISCHARGE LINE BY-PASS COVERS  
 CRA SWITCHRACKS & ANCILLARY STRUCTURES EROSION CONTROL  
 CRA TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT  
 CRA TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT  
 CRA UPS REPLACEMENT  
 CRA VILLAGES DOMESTIC WATER MAIN DISTRIBUTION REPLACEMENT STUDY  
 CRA WATER DISTRIBUTION SYSTEM REPLACEMENT AND CRA ROADWAY ASPHALT REPLACEMENT - ALL PP  
 CUF DECHLORINATION SYSTEM  
 DAM SLUICWAYS 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 DISCHARGE VALVE PIT PLATFORM REPLACEMENT  
 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



**TABLE 3**  
**CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description****Conveyance and Aqueduct Facilities**

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 INERTIE BYPASS LINE REHAB  
 INSULATION JOINT TEST STATIONS  
 INTAKE AND POWER COMMUNICATION LINE RELOCATION  
 INTAKE POWER AND COMMUNICATIONS LINE RELOCATION  
 INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT  
 INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU  
 INTAKE PUMPING PLANT AUTOMATION PROGRAMMING  
 INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT  
 INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & 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 ACQUISITION  
 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 EXPANSION 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

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Conveyance and Aqueduct Facilities**

- 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 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
- 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
- U.S. BUREAU OF LAND MANAGEMENT LAND ACQUISITION
- UPPER FEEDER CATHODIC PROTECTION SYSTEM
- UPPER FEEDER GATES REHABILITATION PROJECTS
- UPPER FEEDER LEAKING EXPANDSION JOINT REPAIR
- VALLEY BRANCH - PIPELINE CORROSION TEST STATION
- WASTEWATER SYSTEM REHABILITATION - GENE/IRON MTN
- WASTEWATER SYSTEM REHABILITATION - HINDS/EAGLE MTN
- WEST VALLEY FEEDER #2 CATHODIC PROTECTION SYSTEM REHABILITATION
- WHITE WATER SIPHON PROTECTION
- WHITewater SIPHON EROSION PROTECTION
- WHITewater SIPHON PROTECTION STRUCTURE

**Sub-total Conveyance and Aqueduct facilities costs**

**\$ 82,714,645**

| <b>TABLE 3<br/>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</b>  |
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| <p><b>Description</b></p> <p><b>Distribution Facilities</b></p> <p>108TH STREET PRESSURE CONTROL STRUCTURE VALVE REPLACEMENT<br/>           42" CONICAL PLUG VALVE REPLACEMENT<br/>           ACCUSONIC FLOW METER UPGRADE<br/>           ACCUSTIC FIBER OPTIC MONITORING OF PCCP LINES<br/>           ALAMEDA CORRIDOR PIPELINE<br/>           ALL FACILITIES - WATER DISCHARGE ELIMINATION<br/>           ALL FACILITIES, INSPECTION AND REPLACEMENT OF CRITICAL VACUUM VALVES<br/>           ALL FEEDERS - MANHOLE LOCKING DEVICE RETROFIT<br/>           ALL PUMPING PLANTS - INSTALL HYPOCHLORINATION STATIONS<br/>           ALLEN MCCOLLOCH PIPELINE 2010 REFURBISHMENT<br/>           ALLEN MCCOLLOCH PIPELINE CATHODIC PROTECTION<br/>           ALLEN MCCOLLOCH PIPELINE INTERCONNECTIONS<br/>           ALLEN MCCOLLOCH PIPELINE LOCAL CONTROL MODIFICATIONS<br/>           ALLEN MCCOLLOCH PIPELINE REPAIR<br/>           ALLEN MCCOLLOCH PIPELINE REPAIR - CARBON FIBER LINING REPAIR<br/>           ALLEN MCCOLLOCH PIPELINE REPAIR - SERVICE CONNECTIONS UPGRADES<br/>           ALLEN MCCOLLOCH PIPELINE REPAIR - STATION 276+63<br/>           ALLEN MCCOLLOCH PIPELINE REPAIR - SURGE SUPPRESSION SYSTEM AT OC88A<br/>           ALLEN MCCOLLOCH PIPELINE REPAIR - VALVE ACTUATOR REPLACEMENTS<br/>           ALLEN MCCOLLOCH PIPELINE REPAIR SERVICE CONNECTIONS SIMPLIFICATION<br/>           ALLEN MCCOLLOCH PIPELINE STRUCTURE - ROOF SLAB REPAIRS<br/>           ALLEN MCCOLLOCH PIPELINE VALVE VAULT REPAIRS<br/>           ALLEN-MCCOLLOCH CORROSION/INTERFERENCE MITIGATION, STATION 719+34 TO 1178+02<br/>           ALLEN-MCCOLLOCH PIPELINE<br/>           ALLEN-MCCOLLOCH PIPELINE OC-76 TURNOUT RELOCATION<br/>           ALLEN-MCCOLLOCH PIPELINE PCCP REHABILITATION<br/>           ALLEN-MCCOLLOCH PIPELINE REFURBISHMENT - STAGE 2<br/>           ALLEN-MCCOLLOCH PIPELINE VALVE AND SERVICE CONNECTION VAULT REPAIRS<br/>           AMP -SERVICE CONNECTIONS UPGRADES<br/>           AMP -VALVE ACTUATOR REPLACEMENTS<br/>           AMP COMPLETION RESOLUTION RIGHT OF WAY ISSUES<br/>           AMR - RTU UPGRADE - PHASE 2<br/>           ANODE WELL REPLACEMENT FOR ORANGE COUNTY AND RIALTO FEEDERS<br/>           APPIAN WAY VALVE REPLACEMENT<br/>           ARROW HIGHWAY PROPERTY DEVELOPMENT<br/>           ASPHALT REPAIRS TO PERIMETER OF SEPULVEDA PCS<br/>           ASSESS THE CONDITION OF METROPOLITAN'S PRESTRESSED CONCRETE CYLINDER PIPE<br/>           ASSESS THE CONDITIONS OF MET'S<br/>           ASSESSMENT OF PRESTRESSED CONCRETE CYLINDER PIPELINES - PHASE 3<br/>           AULD VALLEY CONTROL STRUCTURE AREA FACILITIES<br/>           AUTOMATED RESERVOIR WATER QUALITY MONITORING<br/>           AUTOMATIC METER READING SYSTEM - RTU UPGRADE PHASE 2<br/>           AUTOMATIC METER READING SYSTEM UPGRADE<br/>           AUTOMATION COMMUNICATION UPGRADE<br/>           AUTOMATION DOCUMENTATION SURVEY F/A<br/>           BAR 97- ENHANCED AREA VEHICLE TESTING<br/>           BATTERY MONITORING SYSTEM FOR AUTOMATIC METER READING SYSTEM<br/>           BIXBY VALVE REPLACEMENT<br/>           BLACK METAL MOUNTAIN ELECTRICAL TRANSFORMER<br/>           BOX SPRINGS FEEDER BROKEN BACK REPAIR<br/>           BOX SPRINGS FEEDER BROKEN BACK REPAIR PHASE I<br/>           BOX SPRINGS FEEDER PHASE 3 AND 4 ENVIRONMENTAL MONITORING<br/>           BOX SPRINGS FEEDER REPAIR - PHASE II<br/>           BOX SPRINGS FEEDER REPAIRS PHASE 3 AND PHASE 4<br/>           C&amp;D CRANE INSTALLATION AT OC-88 PUMPING PLANT<br/>           CAJALCO CREEK DAM MANHOLE COVER RETROFIT<br/>           CAJALCO CREEK DETENTION DAM SPILLWAY ACCESS ROAD<br/>           CALABASAS FEEDER CARBON FIBER /BROKEN BACK REPAIR<br/>           CALABASAS FEEDER INTERFERENCE MITIGATION<br/>           CALABASAS FEEDER PCCP REHABILITATION<br/>           CALABASAS FEEDER REPAIR, STUDY<br/>           CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000 FOR FY 2010/11<br/>           CAPITAL PROJECTS COSTING LESS THAN \$250,000 FOR FY2008-09<br/>           CARBON CREEK PRESSURE CONTROL STRUCTURE SEISMIC ASSESSMENT<br/>           CASA LOMA AND SAN DIEGO CANAL LINING STUDY - PART 2<br/>           CASA LOMA SIPHON BARREL 1 &amp; 2 DVL AND SD CANAL FLOW METER REPLACEMENT<br/>           CASA LOMA SIPHON BARREL NO. 1 JOINT REPAIR<br/>           CASA LOMA SIPHON NO 1, CASA LOMA CANAL &amp; SAN DIEGO CANAL FLOW METER REPLACEMENT<br/>           CATHODIC PROTECTION FOR THE FOOTHILL FEEDER<br/>           CATHODIC PROTECTION SYSTEM UPGRADES<br/>           CCP-PHASE 2 CONSTRUCTION<br/>           CDSRP - DISCHARGE ELIMINATION<br/>           CDSRP - ENTRAINED AIR IN UPPER FEEDER PIPELINE STUDY<br/>           CDSRP - SEPULVEDA FEEDER REPAIRS<br/>           CDSRP - SEPULVEDA TANKS RECOATING<br/>           CENTRAL POOL AUGMENTATION - TUNNEL AND PIPELINE &amp; RIGHT-OF-WAY ACQUISITION<br/>           CENTRAL POOL AUGMENTATION (CPA) PROGRAM - PIPELINE AND TUNNEL ALIGNMENT<br/>           CENTRAL POOL AUGMENTATION AND WATER QUALITY PROJECT (CPAWQP)<br/>           CHEMICAL INVENTORY AND USAGE REWRITE AND ELECTRICAL SYSTEM LOG<br/>           CHEMICAL UNLOADING FACILITY RETROFIT<br/>           CHEVALIER FALCON MILLING MACHINE<br/>           COASTAL JUNCTION REVERSE FLOW BYPASS<br/>           COASTAL PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT<br/>           COLLIS AVENUE VALVE REPLACEMENT<br/>           COLLIS VALVE REPLACEMENT<br/>           COLORADO RIVER AQUEDUCT CASA LOMA SIPHON BARREL NO. 1 PROJECT NO. 2 - PERMANENT REPAIRS<br/>           COMMUNICATIONS STRUCTURE ALARM MONITORING<br/>           COMPREHENSIVE INFORMATION SECURITY ASSESSMENT PHASE III<br/>           CONSTRUCTION PHASE 2<br/>           CONTRACT &amp; LITIGATION TASKS -CONTRACT # 1396<br/>           CONTROL SYSTEM DATA STORAGE AND REPORTING<br/>           CONTROL SYSTEM DRAWING &amp; DOCUMENTATION UPDATE<br/>           CONTROL SYSTEM ENHANCEMENT PROGRAM (CSEP) - DIGITAL SUBNET STANDARDIZATION<br/>           CONTROL SYSTEMS AUTOMATION COMMUNICATION UPGRADE<br/>           CONTROLS COMMUNICATIONS FRAME RELAY CONVERSION - APPROPRIATED</p> |

| <b>TABLE 3<br/>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</b>  |
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| <p><b>Description</b></p> <p><b>Distribution Facilities</b></p> <p>CONVERSION OF DEFORMATION SURVEY MONITORING AT GENE WASH, COPPER BASIN, AND DIEMER BASIN 8<br/> CONVEYANCE AND DISTRIBUTION SYSTEM ELECTRICAL STRUCTURES REHABILITATION<br/> CONVEYANCE AND DISTRIBUTION SYSTEM REHABILITATION PROGRAM (CDSRP) - CURRENT DRAIN STATIONS<br/> COPPER BASIN ICS<br/> COPPER BASIN SEWER SYSTEM<br/> CORONA POWER PLANT REPLACE EMERGENCY GENERATOR<br/> CORROSION MATERIALS TESTING FACILITY SCADA UPGRADE<br/> COVINA PRESSURECONTROL FACILITY<br/> COYOTE CREEK NORTHERN PERIMETER LANDSCAPING<br/> COYOTE PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT<br/> CPA PIPELINE &amp; TUNNEL ALIGNMENT<br/> CPA PIPELINE &amp; TUNNEL ALIGNMENT - NON FUNDED PORTION<br/> CPA PIPELINE &amp; TUNNEL ALIGNMENT - STUDY<br/> CPA WATER TREATMENT PLANT - NON FUNDED PORTION<br/> CPA WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2<br/> CPAWQP - PHASE 2<br/> CPAWQP - STUDY AND LAND ACQUISITION - CONTINGENCY<br/> CPAWQP - STUDY AND LAND ACQUISITION - PIPELINE &amp; TUNNEL ALIGNMENT - STUDY<br/> CPAWQP - STUDY AND LAND ACQUISITION - RIGHT-OF-WAY-ACQUISITION<br/> CPAWQP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - RIGHT OF WAY - PHASE 2<br/> CPAWQP - STUDY AND LAND ACQUISITION - WATER TREATMENT PLANT - STUDY<br/> CRA - PC-1 EFFLUENT OPEN CHANNEL TRASH RACK<br/> CRA CABAZON &amp; POTRERO SHAFT COVERS<br/> CRA CONTROL INTEGRATION<br/> CRA PROTECTIVE SLAB AT STATION 9704+77<br/> CROSS CONNECTION PREVENTION PROGRAM - PHASE II CONSTRUCTION<br/> CROSS CONNECTION PREVENTION PROJECT, COMPLETE PRELIMINARY DESIGN AND CEQA DOCUMENTATION<br/> CSEP - ELECTRONIC SYSTEM LOG (ESL)<br/> CSEP - ENERGY MANAGEMENT SYSTEM PHASE II<br/> CSEP - ENHANCED DISTRIBUTION SYSTEM CONTROL PROJECT<br/> CSEP - IMPLEMENTATION<br/> CSEP - OPERATIONS &amp; BUSINESS DATA INTEGRATION PILOT<br/> CSEP - PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING<br/> CSEP - PLC PHASE 2 - LIFE-CYCLE REPLACEMENT<br/> CSEP - PLC STANDARDIZATION<br/> CSEP - PLC STANDARDIZATION PHASE II<br/> CSEP - POWER MANAGEMENT SYSTEM<br/> CSEP - WATER PLANNING APPLICATION<br/> CSEP IMPLEMENTATION<br/> CSEP- SMART OPS (FORMERLY REAL TIME OPERATIONS SIMULATION)<br/> CURRENT DRAIN STATIONS<br/> DAM REHABILITATION &amp; SAFETY IMPROVEMENTS ST. JOHN'S CANYON CHANNEL EROSION MITIGATION<br/> DANBY TOWER FOUNDATION INVESTIGATION AND SHORT TERM MITIGATION<br/> DEODERA PCS PAVEMENT UPGRADE &amp; BETTERMENT<br/> DESERT BRANCH - REPLACE STOLEN COPPER GROUND WIRE FOOTINGS/GROUNDING, AND COPPER PIPING<br/> DESERT BRANCH PUMP PLANT AUXILIARY (STATION SERVICE)<br/> DESERT BRANCH, PURCHASE &amp; INSTALL 5 PORT VIDEO CONFERENCING<br/> DESERT FACILITIES DOMESTIC WATER GAC SYSTEM INSTALLATION<br/> DESERT HIGH VOLTAGE TRANSMISSION TOWERS - REPLACE COPPER GROUND WIRES ON<br/> DETAIL SEISMIC EVALUATION OF WATER STORAGE TANK<br/> DFP - ELIMINATE BACKUP GENERATOR TIE-BUS &amp; INSTALL MANUAL TRANSFER SWITCH FOR CHLORINE SCRUBBER<br/> DIEMER FILTRATION PLANT - SLOPE REPAIR<br/> DISCHARGE ELIMINATION<br/> DIST SYS-AIR RELEASE &amp; VAC VALVE MODS<br/> DISTRIBUTION SYSTEM - CCPP CONSTRUCTION PACKAGES 9,11,12<br/> DISTRIBUTION SYSTEM - STANDPIPE STRENGTHENING PROGRAM<br/> DISTRIBUTION SYSTEM - STATIONARY CORROSION REFERENCE<br/> DISTRIBUTION SYSTEM - TREATED WATER CROSS CONNECTION PREVENTION PROJECT - FINAL DESIGN &amp; CONSTRUCTION<br/> DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF LOS ANGELES COUNTY<br/> DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF RIVERSIDE AND SAN DIEGO COUNTY<br/> DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF SAN BERNARDINO COUNTY<br/> DISTRIBUTION SYSTEM CONTROL &amp; EQUIP UPGRADE - ENHANCED DISTRIB. SYSTEM AUTOMATION PHASE I<br/> DISTRIBUTION SYSTEM EQUIPMENT &amp; INSTRUMENTATION UPGRADES<br/> DISTRIBUTION SYSTEM INFRASTRUCTURE PROTECTION IMPROVEMENTS FOR ORANGE COUNTY<br/> DISTRIBUTION SYSTEM REHABILITATION PROGRAM - ASSESS THE STATE OF MWD'S DISTRIBUTION SYSTEM<br/> DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS - WILLOWGLEN RTUS ADMINISTRATION<br/> DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS (DSRACS)<br/> DISTRICT WIDE - ENHANCED VAPOR RECOVERY PHASE 2 GASOLINE DISPENSING<br/> DSRACS - OPERATIONS CONTROL CENTER - CONTRACT #1396<br/> DSRACS - SKINNER AREA<br/> DSRACS - SOFTWARE DEVELOPMENT COST<br/> DSRACS - WEYMOUTH<br/> DVL &amp; CONTROL SYSTEM REPLACEMENT INVESTIGATION &amp; PREPARATION FOR PRELIMINARY DESIGN<br/> EAGLE EQUIPMENT WASH AREA UPGRADE<br/> EAGLE ROCK - ASPHALT REHABILITATION<br/> EAGLE ROCK - FIRE PROTECTION AT THE WESTERN AREA OF THE EAGLE ROCK CONTROL CENTER PERIMETER GROUNDS<br/> EAGLE ROCK CONTROL CENTER FIREHYDRANT<br/> EAGLE ROCK LATERAL INTERCONNECTION REPAIR<br/> EAGLE ROCK MAIN BUILDING ROOF REPLACEMENT - STUDY<br/> EAGLE ROCK OCC - REHAB CONTROL ROOM<br/> EAGLE ROCK OPERATIONS CONTROL CENTER<br/> EAGLE ROCK RESIDENCE CONVERSION<br/> EAGLE ROCK TOWER AND PUDDINGSTONE SPILLWAY GATES REHABILITATION<br/> EAGLE ROCK TOWER SLIDEGATE REHABILITATION<br/> EAST INFLUENT CHANNEL REPAIR PROJECT<br/> EAST ORANGE COUNTY FEEDER #2 REPAIR<br/> EAST VALLEY FEEDER VALVE STRUCTURE ELECTRICAL UPGRADE<br/> EASTERN AND DESERT REGIONS PLUMBING RETROFIT<br/> EASTERN REGION PCCP JOINT MODIFICATION 2012<br/> E-DISCOVERY STORAGE MANAGEMENT SYSTEM UPGRADE<br/> ELECTRIC CURRENT DRAIN STATION INSTALLATIONS<br/> ELECTRICAL UPGRADES AT 15 STRUCTURES IN THE OC REGION<br/> ELECTROMAGNETIC INSPECTIONS OF PCCP LINES<br/> ELECTRONIC SYSTEM LOG (ESL)</p> |

| <b>TABLE 3<br/>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</b>                    |
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| <b>Description</b>   |
| <b>Distribution Facilities</b>   |
| 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   |
| ENVIRONMENTAL REGULATORY AGREEMENTS AND OTHER REGULATORY AGENCY                          |
| 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                                    |
| 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 PIPELINE LINING REPAIRS   |
| ETIWANDA RESERVOIR - EXTEND OUTLET STRUCTURE   |
| FACILITY AND PROCESS RELIABILITY ASSESSMENT  |
| FAIRPLEX AND WALNUT PCS VALVES REPLACEMENT   |
| FILTER ISOLATION GATE AND BACKWASH CONTROL WEIR COVERS MODULES 1- 6                      |
| FLOW METER REPLACEMENT PROJECT   |
| FLOWMETER MODIFICATION - LAKE SKINNER INLET, ETIWANDA EFFLUENT & WADSWORTH CROSS CHANNEL |
| FOOTHILL & SEPULVEDA FEEDER PCOP CARBON FIBER JOINT REPAIRS                              |
| FOOTHILL FEEDER - CASTAIC VALLEY BLOW-OFF VALVES REPLACEMENT                             |
| 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 CONTROL VALVES REPLACEMENT  |
| GARVEY RESERVOIR HYPOCHLORITE FEED SYSTEM  |
| GARVEY RESERVOIR SITE DRAINAGE REPAIRS AND MODIFICATIONS                                 |
| GARVEY RESERVOIR SODIUM HYPOCHLORITE FEED SYSTEM REHABILITATION                          |
| 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 CONNECTION REHABILITATION AND UPGRADE                                |
| GLENDALE-01 SERVICE CONNECTION REHABILITATION  |
| GREG AVE PCS FACILITY REHABILITATION   |
| GREG AVENUE CONTROL STRUCTURE VALVE REPLACEMENT  |
| GREG AVENUE PCS - PUMP MODIFICATIONS AND NEW CONTROL BUILDING                            |
| GREG AVENUE PCS CONTROL BUILDING INTERIOR REHABILITATION                                 |
| HINDS GARAGE ASBESTOS SHEETING REPLACEMENT   |
| HOLLYWOOD TUNNEL NORTH PORTAL EQUIPMENT UPGRADES   |
| HVAC MODIFICATIONS FOR ELECTRICAL SAFETY AND RELIABILITY                                 |
| HYDRAULIC MODELING PROJECT   |
| HYDROELECTRIC PLANT CARBON DIOXIDE (CO2) FIRE SUPPRESSION SYSTEM MODIFICATIONS           |
| HYDROELECTRIC POWER PLANT (HEP) DISCHARGE ELIMINATION                                    |
| IAS PROJECTS - CPA   |
| IAS PROJECTS - DVL-SKINNER   |
| IAS PROJECTS - MILLS SUPPLY RELIABILITY  |
| INLAND FEEDER AND LAKEVIEW PIPELINE INTERTIE   |
| 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  |
| 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  |

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

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 AREA DISTRIBUTION SYSTEM VALVE 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  
 LAKEVIEW PIPELINE REPAIR  
 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  
 MIDDLE FEEDER - CATHODIC PROTECTION SYSTEMS  
 MIDDLE FEEDER - NORTH CATHODIC PROTECTION SYSTEM  
 MIDDLE FEEDER BLOW-OFF VALVE REPLACEMENT AT STA 782+53.16  
 MIDDLE FEEDER NORTH CATHODIC PROTECTION SYSTEM  
 MIDDLE FEEDER RELOCATION FOR SCE MESA SUBSTATION  
 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 PCS VALVE REPLACEMENT  
 OLINDA PRESSURE CONTROL STRUCTURE  
 OLINDA PRESSURE CONTROL STRUCTURE AND SANTIAGO TOWER EMERGENCY GENERATORS  
 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 AREA DISTRIBUTION SYSTEM VALVE REPLACEMENT  
 ORANGE COUNTY C & D ELECTRICAL IMPROVEMENTS - STUDY  
 ORANGE COUNTY C&D INSTRUMENTATION PANEL IMPROVEMENTS  
 ORANGE COUNTY C&D TEAM SUPPORT FACILITY  
 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 REPAIRS  
 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 - LONG BEACH LATERAL TURNOUT STRUCTURES STA. 1442+15 VALVE REPLACEMENTS  
 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

| <b>TABLE 3<br/>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</b>   |
|---|
| <b>Description</b>  |
| <b>Distribution Facilities</b>  |
| PCCP REHABILITATION - PROGRAM MANAGEMENT  |
| 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 - TUNNELS  |
| 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 (PCCP) STRUCTURAL PERFORMANCE RISK ANALYSIS  |
| PRESTRESSED CONCRETE CYLINDER PIPE -PHASE 3   |
| PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION OF ORANGE COUNTY   |
| PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION OF SAN BERNARDINO COUNTY   |
| PROGRAMMABLE LOGIC CONTROLLER (PLC) STANDARDIZATION   |
| PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE LOS ANGELES CO. OPERATING REGION   |
| PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE ORANGE COUNTY OPERATING REGION   |
| PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE RIVERSIDE/SAN DIEGO CO. OPERATING REGION   |
| PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE WESTERN SAN BERNARDINO COUNTY OPERATING REGION                                   |
| PUDDINGSTONE SPILLWAY CROSS CONNECTION  |
| PV RESERVOIR HYPOCHLORITE PUMP AND PIPING REPLACEMENT   |
| R&R FOR DISTRIBUTION  |
| REAL PROPERTY ACQUISITION   |
| RED MOUNTAIN - OCT. 2007 FIRE DAMAGE - COMMUNICATION POWER TOWERS & METER STRUCTURES REPAIR/REPLACE (INCIDENT NO. 2007-1023-0271) |
| RED MOUNTAIN HEP FLOOD DAMAGE   |
| 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   |
| RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - LOS ANGELES COUNTY REGION  |
| RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - O. C. REGION   |
| RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - RIVERSIDE AND SAN DIEGO COUNTY REGION  |
| RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - WESTERN SAN BERNARDINO COUNTY REGION   |
| RIGHT OF WAY SURVEY AND MAPPING   |
| RIO HONDO PRESSURE CONTROL STRUCTURE VALVE REPLACEMENTS   |
| 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 (VO-6) REHABILITATION   |
| SAN DIEGO CANAL RADIAL GATE (VO-8) REHABILITATION   |
| 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   |

**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

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. 3 PIPING MODIFICATIONS  
 SAN DIEGO PIPELINE NO. 5 - OCT. 2007 FIRE DAMAGE - REPLACE ABOVE GROUND CORROSION CONTROL SYSTEM EQUIPMENT, AND STRUCTURAL APPURTENANCES  
 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  
 SAN DIEGO PIPELINE NO.4 & AULD VALLEY PIPELINE CARBON FIBER REPAIR STUDY  
 SAN DIEGO PIPELINE NOS. 1AND 3 - VALVE REPLACEMENT  
 SAN DIMAS AND RED MOUNTAIN POWER PLANTS STANDBY DIESEL ENGINE GENERATOR REPLACEMENTS  
 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 JACINTO DIVERSION STRUCTURE SLIDE GATE V-03 REPLACEMENT  
 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 EXPANSION JOINT REPLACEMENT  
 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 EXPLORATORY EXCAVATION  
 SD PIPELINES 3 AND 5 REMOTE CONTROL BYPASS STRUCTURE GATES AND ISOLATION VALVES  
 SECOND LOWER & SEPULVEDA FEEDERS SCI DRAIN STATIONS  
 SECOND LOWER CROSS FEEDER - VALVE PROCUREMENT  
 SECOND LOWER CROSS FEEDER CONSTRUCTION  
 SECOND LOWER CROSS FEEDER FINAL DESIGN  
 SECOND LOWER FEEDER - INSTALL LINER  
 SECOND LOWER FEEDER CATHODIC PROTECTION SYSTEM  
 SECOND LOWER FEEDER CURRENT MITIGATION REFURBISHMENT  
 SECOND LOWER FEEDER PCCP REHABILITATION



**TABLE 3  
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS**

**Description**

**Distribution Facilities**

SECOND LOWER FEEDER PCCP REHABILITATION - PHASE I: PIPE PROCUREMENT  
 SECOND LOWER FEEDER PCCP REHABILITATION - PHASE I: PRELIMINARY DESIGN  
 SECOND LOWER FEEDER PCCP REHABILITATION - PHASE I: REACH 1  
 SECOND LOWER FEEDER PCCP REHABILITATION - PHASE I: REACH 2  
 SECOND LOWER FEEDER PCCP REHABILITATION - PHASE I: REACH 3  
 SECOND LOWER FEEDER PCCP REHABILITATION - PHASE I: REACH 4  
 SECOND LOWER FEEDER PCCP REHABILITATION - PHASE I: REACH 5  
 SECOND LOWER FEEDER PCCP REHABILITATION - PHASE I: REACH 6  
 SECOND LOWER FEEDER PCCP REHABILITATION - PHASE I: ROW ACQUISITION  
 SECOND LOWER FEEDER PCCP REHABILITATION - PHASE I: VALVE PROCUREMENT  
 SECOND LOWER FEEDER PCCP REPAIRS  
 SECOND LOWER FEEDER RELIABILITY AT 3 LOCATIONS - SEISMIC STUDY  
 SEISMIC UPGRADE OF 11 FACILITIES ON THE ALLEN MCCOLLOCH PIPELINE  
 SEISMIC UPGRADES AT 10 SERVICE CONNECTION STRUCTURES ALONG AMP  
 SELECTED PRESSURE REPLACE VALVE POSITION INDICATORS  
 SEPULVEDA CANYON CONTROL FACILITY BYPASS PROJECT  
 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  
 SEPULVEDA-WEST BASIN INTERCONNECTION VALVE REPLACEMENTS  
 SERVICE CONNECTION LV-01 UPGRADES  
 SERVICE CONNECTION OC-26 - RELOCATION OF METER CABINET, INSTRUMENT HOUSING & AIR VENT STACK  
 SERVICE CONNECTIONS CB-12 & CB-16 TURNOUT VALVE REPLACEMENT & ELECTRICAL UPGRADE  
 SIMULATION AND MODELING APPLICATION FOR REAL TIME OPERATIONS SMART OPS  
 SITE 3 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN  
 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 FACILITY AREA PAVING  
 SKINNER FILTRATION PLANT - ELEVATED SLAB IN SERVICE BLDG 1  
 SKINNER HELIPAD REHAB  
 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  
 SYSTEM-WIDE ASPHALT REPLACEMENT  
 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.  
 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 - STRUCTURAL PROTECTION  
 UPPER FEEDER AIR ENTRAINMENT  
 UPPER FEEDER CATHODIC PROTECTION SYSTEM  
 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  
 VIDEOCONFERRING UPGRADE

| <b>TABLE 3<br/>CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS</b>                |                      |
|--|----------------------|
| <b>Description</b>   |                      |
| <b>Distribution Facilities</b>   |                      |
| WADSWORTH PUMPING PLANT - MODIFICATION/REPAIRS OF FIFTY-NINE 6.9KV BREAKERS/CABINETS |                      |
| WADSWORTH PUMPING PLANT CONDUIT REPAIR AND PROTECTION                                |                      |
| WADSWORTH PUMPING PLANT CONTROL & PROTECTION UPGRADES                                |                      |
| 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                                  |                      |
| WEST COAST FEEDER - CATHODIC PROTECTION SYSTEMS                                      |                      |
| WEST OC FEEDER VALVE REPLACEMENT   |                      |
| WEST ORANGE COUNTY FEEDER OC-09 REHABILITATION                                       |                      |
| WEST ORANGE COUNTY 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 STRUCTURE IMPROVEMENTS (STAGE 3)           |                      |
| 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 - PURCHASE OF REAL PROPERTY  |                      |
| WFP - REPAIR TO BLDG # 1   |                      |
| YORBA LINDA FEEDER - STA 924+11 PORTAL ACCESS  |                      |
| YORBA LINDA FEEDER BYPASS  |                      |
| YORBA LINDA PORTAL STRUCTURE ACCESS/TELEGRAPH CREEK BRIDGE                           |                      |
| <b>Sub-total Distribution facilities costs</b>                                       | <b>\$ 78,607,619</b> |

| <b>FISCAL YEAR 2019/20</b>                         |   |                  |   |   |                  |  |                                    |
|--|---|------------------|---|---|------------------|--|------------------------------------|
| <b>ESTIMATED READINESS-TO-SERVE CHARGE REVENUE</b> |   |                  |   |   |                  |  |                                    |
| <b>Member Agency</b>                               | <b>Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2007/08 - FY2016/17</b> | <b>RTS Share</b> | <b>6 months @ \$133 million per year (7/19-12/19)</b> | <b>Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2008/09 - FY2017/18</b> | <b>RTS Share</b> | <b>6 months @ \$136 million per year (1/20-6/20)</b> | <b>Total RTS Charge FY 2019/20</b> |
| Anaheim  | 18,523.8  | 1.14%            | 758,843   | 18,484.7  | 1.19%            | 808,227  | 1,567,070                          |
| Beverly Hills                                      | 10,823.4  | 0.67%            | 443,389   | 10,636.8  | 0.68%            | 465,085  | 908,474                            |
| Burbank  | 12,640.6  | 0.78%            | 517,833   | 12,505.3  | 0.80%            | 546,783  | 1,064,616                          |
| Calleguas MWD                                      | 103,113.8   | 6.35%            | 4,224,141   | 100,327.3   | 6.45%            | 4,386,723  | 8,610,864                          |
| Central Basin MWD                                  | 48,484.8  | 2.99%            | 1,986,219   | 45,375.1  | 2.92%            | 1,983,986  | 3,970,206                          |
| Compton  | 1,274.6   | 0.08%            | 52,215  | 1,052.6   | 0.07%            | 46,024   | 98,239                             |
| Eastern MWD  | 95,591.2  | 5.89%            | 3,915,972   | 95,589.5  | 6.15%            | 4,179,567  | 8,095,539                          |
| Foothill MWD                                       | 9,104.1   | 0.56%            | 372,957   | 8,761.7   | 0.56%            | 383,098  | 756,055                            |
| Fullerton  | 8,711.6   | 0.54%            | 356,878   | 8,520.9   | 0.55%            | 372,569  | 729,447                            |
| Glendale   | 17,789.4  | 1.10%            | 728,757   | 17,219.1  | 1.11%            | 752,890  | 1,481,647                          |
| Inland Empire Utilities Agency                     | 58,419.2  | 3.60%            | 2,393,190   | 58,335.2  | 3.75%            | 2,550,655  | 4,943,846                          |
| Las Virgenes MWD                                   | 21,650.8  | 1.33%            | 886,943   | 20,859.4  | 1.34%            | 912,059  | 1,799,002                          |
| Long Beach   | 32,108.6  | 1.98%            | 1,315,355   | 31,074.3  | 2.00%            | 1,358,696  | 2,674,052                          |
| Los Angeles  | 322,746.6   | 19.88%           | 13,221,578  | 298,801.6   | 19.21%           | 13,064,838   | 26,286,416                         |
| Municipal Water District of Orange County          | 210,138.2   | 12.95%           | 8,608,483   | 214,227.5   | 13.77%           | 9,366,909  | 17,975,393                         |
| Pasadena   | 19,875.5  | 1.22%            | 814,216   | 19,306.1  | 1.24%            | 844,142  | 1,658,358                          |
| San Diego County Water Authority                   | 318,873.9   | 19.64%           | 13,062,930  | 287,538.4   | 18.49%           | 12,572,364   | 25,635,294                         |
| San Fernando                                       | 35.7  | 0.00%            | 1,462   | 35.7  | 0.00%            | 1,561  | 3,023                              |
| San Marino   | 815.9   | 0.05%            | 33,424  | 854.7   | 0.05%            | 37,371   | 70,795                             |
| Santa Ana  | 11,210.7  | 0.69%            | 459,255   | 11,281.3  | 0.73%            | 493,265  | 952,520                            |
| Santa Monica                                       | 7,253.7   | 0.45%            | 297,154   | 6,403.0   | 0.41%            | 279,966  | 577,119                            |
| Three Valleys MWD                                  | 63,729.7  | 3.93%            | 2,610,739   | 62,968.2  | 4.05%            | 2,753,229  | 5,363,969                          |
| Torrance   | 16,891.1  | 1.04%            | 691,958   | 16,507.9  | 1.06%            | 721,793  | 1,413,751                          |
| Upper San Gabriel Valley MWD                       | 24,161.1  | 1.49%            | 989,779   | 22,639.8  | 1.46%            | 989,905  | 1,979,685                          |
| West Basin MWD                                     | 118,121.7   | 7.28%            | 4,838,952   | 116,023.0   | 7.46%            | 5,073,004  | 9,911,956                          |
| Western MWD  | 71,214.9  | 4.39%            | 2,917,377   | 69,876.5  | 4.49%            | 3,055,289  | 5,972,665                          |
| <b>MWD Total</b>                                   | <b>1,623,304.6</b>  | <b>100.00%</b>   | <b>\$ 66,500,000</b>                                  | <b>1,555,205.6</b>  | <b>100.00%</b>   | <b>\$ 68,000,000</b>                                 | <b>\$ 134,500,000</b>              |
| Totals may not foot due to rounding                |   |                  |   |   |                  |  |                                    |

**TABLE 5**  
**FISCAL YEAR 2019/20**  
**ESTIMATED STANDBY CHARGE REVENUE**

| <b>Member Agencies</b>                                 | <b>Total<br/>Parcel<br/>Charge</b> | <b>Number<br/>Of Parcels<br/>Or Acres</b> | <b>Gross<br/>Revenues<br/>(Dollars) <sup>1</sup></b> |
|--|------------------------------------|---|--|
| Anaheim  | \$ 8.55                            | 68,382                                    | \$ 584,663   |
| Beverly Hills  | -                                  | -   | -  |
| Burbank  | 14.20                              | 29,140                                    | 413,795  |
| Calleguas MWD  | 9.58                               | 254,997                                   | 2,442,874  |
| Central Basin MWD                                      | 10.44                              | 340,338                                   | 3,553,124  |
| Compton  | 5.00                               | 18,092                                    | 90,462   |
| Eastern MWD  | 6.94                               | 405,408                                   | 2,813,533  |
| Foothill MWD   | 10.28                              | 30,338                                    | 311,872  |
| Fullerton  | 10.71                              | 34,753                                    | 372,202  |
| Glendale   | 12.23                              | 44,921                                    | 549,379  |
| Inland Empire Utilities Agency                         | 7.59                               | 250,405                                   | 1,900,570  |
| Las Virgenes MWD                                       | 8.03                               | 54,296                                    | 435,997  |
| Long Beach   | 12.16                              | 92,128                                    | 1,120,275  |
| Los Angeles  | -                                  | -   | -  |
| Municipal Water District of Orange County <sup>2</sup> | 10.09                              | 657,887                                   | 7,480,088  |
| Pasadena   | 11.73                              | 39,261                                    | 460,528  |
| San Diego County Water Authority                       | 11.51                              | 1,106,495                                 | 12,735,761   |
| San Fernando   | -                                  | 5,104                                     | -  |
| San Marino   | 8.24                               | 4,966                                     | 40,923   |
| Santa Ana  | 7.88                               | 54,433                                    | 428,934  |
| Santa Monica   | -                                  | -   | -  |
| Three Valleys MWD                                      | 12.21                              | 152,699                                   | 1,864,460  |
| Torrance   | 12.23                              | 40,548                                    | 495,898  |
| Upper San Gabriel Valley MWD                           | 9.27                               | 213,392                                   | 1,978,147  |
| West Basin MWD   | -                                  | -   | -  |
| Western MWD  | 9.23                               | 388,077                                   | 3,581,955  |
| <b>MWD Total</b>                                       |                                    | <b>4,286,060</b>                          | <b>\$ 43,655,439</b>                                 |

(1) Estimates per FY2018/19 parcel information

(2) Adjusted for inclusion of Coastal MWD

Note: Totals may not foot due to rounding.



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

RESOLUTION \_\_\_\_

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**RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE METROPOLITAN WATER DISTRICT OF  
SOUTHERN CALIFORNIA  
FIXING AND ADOPTING  
A CAPACITY CHARGE  
EFFECTIVE JANUARY 1, 2020**

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The Board of Directors of The Metropolitan Water District of Southern California (the “Board”) hereby finds that:

1. The 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
2. 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 agencies shall be in accordance with the method established by the Board; and
3. The Capacity Charge is a charge fixed and adopted by Metropolitan and charged to its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and
4. 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 FYs 2018/19 and 2019/20 Cost of Service Report for Proposed Water Rates and Charges (the “2018 Cost of Service Report”); and
5. Pursuant to Resolution 8329, adopted by the Board on July 9, 1991 and Resolution 9199, adopted by the Board on March 8, 2016, and as each is thereafter amended and supplemented, proceeds of the RTS Charge, Capacity Charge, and other revenues from the sale or availability of water are pledged to the payment of Metropolitan’s outstanding revenue bonds and to the payment of Metropolitan’s outstanding subordinate revenue bonds and to revenue bonds and subordinate bonds to be issued pursuant to Resolution 8329 and Resolution 9199; and
6. The Capacity Charge is charged (on a dollar per cubic-foot-per-second basis) to member public agencies (“member agencies”), based upon the amount of capacity used by such member agency that is designed to recover the cost of providing peaking capacity within the distribution system; and

7. In *San Diego County Water Authority v. Metropolitan Water District of Southern California, et al.*, San Francisco Superior Court Case Nos. CPF-16-515282, CPG-17-563350, and CPF-18-516389 (the “2016, 2017, and 2018 Cases”, collectively), the San Diego County Water Authority challenged Metropolitan’s water charges adopted on April 12, 2016, April 11, 2017, and April 10, 2018, respectively, and also challenged Metropolitan’s rates. Metropolitan is defending such challenges; and

8. Metropolitan maintains that its rates and charges are appropriate. There is no final judgment in the identified cases and Metropolitan does not anticipate a final judgement in CY 2020; and

9. On April 10, 2018, the board considered the rates and charges presented by the General Manager and approved the biennial budget for fiscal years 2018/19 and 2019/20 and adopted recommended water rates for calendar years 2019 and 2020 and charges for calendar year 2019, and received information and documents available at <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx> and <http://mwdh2o.com/WhoWeAre/Pages/FYs-2018-19-2019-20-proposed-property-tax-rates.aspx>; and

10. In approving the biennial budget and adopting the rates and charges on April 10, 2018, the Board determined the amount of revenue to be raised by the Capacity Charge in calendar year 2020 to be based on a Capacity Charge in such year of \$8,800 per cubic-foot-per-second, based on information and documents available at <http://www.mwdh2o.com/WhoWeAre/Pages/proposed-budget-rates.aspx> and <http://mwdh2o.com/WhoWeAre/Pages/FYs-2018-19-2019-20-proposed-property-tax-rates.aspx>; and

11. 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 does hereby resolve, determine and order as follows:

**Section 1.** That the Board hereby fixes and adopts a Capacity Charge, as described below, to be effective January 1, 2020.

**Section 2.** That said 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 other appropriately allocated costs, incurred to provide peaking capacity within Metropolitan’s distribution system.

**Section 3.** That such Capacity Charge effective January 1, 2020 shall be a charge as specified in Section 5 (set in dollars per cubic-foot-per-second of the peak day capacity) for capacity provided to a member agency.

**Section 4.** That the Capacity Charge specified in Section 5, together with other revenues from Metropolitan’s water rates, other charges, ad valorem property taxes, and other miscellaneous revenue, does not exceed the reasonable and necessary cost of providing Metropolitan’s water service for which the rates and charges are made, or conferring the benefit provided, and is fairly apportioned to each member agency in proportion to the peak day capacity utilized by each member agency.

**Section 5.** That the Capacity Charge shall be a fixed charge as shown in the following table and collected from each member agency monthly, quarterly or semiannually as agreed to by Metropolitan and the member agency.

**Table 1. Calendar Year 2020 Capacity Charge**

| AGENCY            | Peak Day Demand (cfs)<br>(May 1 through September 30) |                |                |                | Rate (\$/cfs):<br>\$8,800                |
|-------------------|---|----------------|----------------|----------------|--|
|                   | Calendar Year   |                |                |                | Calendar Year<br>2020 Capacity<br>Charge |
|                   | 2016  | 2017           | 2018           | 3-Year Peak    |  |
| Anaheim           | 29.7  | 33.0           | 37.2           | 37.2           | \$327,360                                |
| Beverly Hills     | 26.2  | 25.7           | 27.8           | 27.8           | \$244,640                                |
| Burbank           | 12.1  | 14.0           | 17.1           | 17.1           | \$150,480                                |
| Calleguas         | 175.1   | 186.5          | 184.7          | 186.5          | \$1,641,200                              |
| Central Basin     | 43.0  | 36.7           | 39.3           | 43.0           | \$378,400                                |
| Compton           | 0.3   | 0.1            | 6.9            | 6.9            | \$60,720                                 |
| Eastern           | 204.8   | 216.6          | 229.4          | 229.4          | \$2,018,720                              |
| Foothill          | 17.1  | 18.6           | 19.9           | 19.9           | \$175,120                                |
| Fullerton         | 14.3  | 13.0           | 13.3           | 14.3           | \$125,840                                |
| Glendale          | 38.8  | 41.4           | 33.5           | 41.4           | \$364,320                                |
| Inland Empire     | 118.3   | 140.5          | 147.8          | 147.8          | \$1,300,640                              |
| Las Virgenes      | 45.3  | 44.6           | 45.9           | 45.9           | \$403,920                                |
| Long Beach        | 61.5  | 55.2           | 80.4           | 80.4           | \$707,520                                |
| Los Angeles       | 531.7   | 250.4          | 284.6          | 531.7          | \$4,678,960                              |
| MWDOC             | 401.1   | 418.6          | 442.3          | 442.3          | \$3,892,240                              |
| Pasadena          | 38.0  | 39.9           | 43.0           | 43.0           | \$378,400                                |
| San Diego CWA     | 911.3   | 749.9          | 855.6          | 911.3          | \$8,019,440                              |
| San Fernando      | 0.0   | 0.0            | 0.0            | 0.0            | \$0                                      |
| San Marino        | 6.8   | 7.5            | 4.5            | 7.5            | \$66,000                                 |
| Santa Ana         | 14.7  | 19.9           | 19.3           | 19.9           | \$175,120                                |
| Santa Monica      | 10.8  | 16.6           | 16.7           | 16.7           | \$146,960                                |
| Three Valleys     | 113.5   | 126.4          | 143.2          | 143.2          | \$1,260,160                              |
| Torrance          | 39.1  | 34.0           | 32.6           | 39.1           | \$344,080                                |
| Upper San Gabriel | 11.9  | 12.1           | 23.3           | 23.3           | \$205,040                                |
| West Basin        | 197.9   | 201.7          | 202.4          | 202.4          | \$1,781,120                              |
| Western MWD       | 175.4   | 175.2          | 192.7          | 192.7          | \$1,695,760                              |
| <b>Total</b>      | <b>3,238.7</b>  | <b>2,878.1</b> | <b>3,143.4</b> | <b>3,470.7</b> | <b>\$30,542,160</b>                      |

Totals may not foot due to rounding

**Section 6.** That the Capacity Charge for each member agency, the method of its calculation, cost allocations and other data used in its determination are as specified in the adopted rates and charges to be effective January 1, 2020, which forms the basis of the Capacity Charge, and the corresponding 2018 Cost of Service Report. The adopted rates and charges and cost of service reports are on file and available for review by interested parties at Metropolitan's headquarters.

**Section 7.** 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 8.** 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 9.** That the General Manager is hereby authorized and directed to take all necessary action to satisfy relevant statutes requiring notice by publication.

**Section 10.** 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 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 9, 2019.

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Secretary of the Board of Directors  
of the Metropolitan Water District  
of Southern California

**NOTICE TO MEMBER AGENCIES OF PROPOSED ADOPTION OF READINESS-TO-SERVE CHARGE AND CAPACITY CHARGE FOR CALENDAR YEAR 2020 AND CONTINUATION OF STANDBY CHARGE FOR FISCAL YEAR 2019/20**

The Board of the Metropolitan Water District of Southern California (Metropolitan) adopted a biennial budget for fiscal years 2018/19 and 2019/20 on April 10, 2018. On the same date, the Board also adopted rates for calendar years 2019 and 2020 and charges for calendar year 2019 to meet revenue requirements for fiscal years 2018/19 and 2019/20. The Board's determinations were based on the assumption of Readiness-To-Serve charge collections for calendar year 2020 of \$136 million and a Capacity Charge set at \$8,800 per cubic-foot-second. Accordingly, notice is hereby given to each member public agency of Metropolitan that at its regular meeting to be held April 9, 2019 (or such other date as the Board shall hold its regular meeting in such month), Metropolitan's Board of Directors will consider the adoption of the Readiness-To-Serve Charge and Capacity Charge for calendar year 2020.

The Board's determinations on April 10, 2018 were also based on the continuation of Metropolitan's water standby charge for fiscal year 2019/20. Accordingly, at its regular meeting to be held May 14, 2019, (or such other date as the Board shall hold its regular meeting in such month), the Board will consider the General Manager's recommendation to continue Metropolitan's water standby charge for fiscal year 2019/20 under authority of Section 134.5 of the Act on land within Metropolitan at rates not to exceed, per acre of land, or per parcel of land less than an acre, as presently in effect. Any such water standby charge will be continued as a means of collecting the Readiness-To-Serve charge.

Board letters with information about the proposed charges will be provided to the Board prior to the board meetings.

Dated: February 6, 2019



June Skillman  
Interim Assistant General Manager/Chief Financial Officer

**PROOF OF SERVICE**

STATE OF CALIFORNIA        )  
   ) ss.  
 COUNTY OF LOS ANGELES    )

I am employed in the County of Los Angeles, State of California. I am over the age of 18 years and am employed by The Metropolitan Water District of Southern California; my business address is 700 North Alameda Street, Los Angeles, California 90012.

On February 6, 2019, I served the foregoing document described as:

**NOTICE TO MEMBER AGENCIES OF PROPOSED ADOPTION OF READINESS-TO-SERVE CHARGE AND CAPACITY CHARGE FOR CALENDAR YEAR 2020 AND CONTINUATION OF STANDBY CHARGE FOR FISCAL YEAR 2019/20**

on the Metropolitan member public agencies via electronic mail (email) to the following email addresses:

[dulee@anaheim.net](mailto:dulee@anaheim.net); [sepstein@beverlyhills.org](mailto:sepstein@beverlyhills.org); [jsomoano@ci.burbank.ca.us](mailto:jsomoano@ci.burbank.ca.us);  
[smulligan@calleguas.com](mailto:smulligan@calleguas.com); [kevinh@centralbasin.org](mailto:kevinh@centralbasin.org); [bdickinson@comptoncity.org](mailto:bdickinson@comptoncity.org);  
[jonesp@emwd.org](mailto:jonesp@emwd.org); [nina.jaz@fmwd.com](mailto:nina.jaz@fmwd.com); [hyejinl@ci.fullerton.ca.us](mailto:hyejinl@ci.fullerton.ca.us); [szurn@glendaleca.gov](mailto:szurn@glendaleca.gov);  
[hrazak@ieua.org](mailto:hrazak@ieua.org); [dpedersen@lvmwd.com](mailto:dpedersen@lvmwd.com); [chris.garner@lbwater.org](mailto:chris.garner@lbwater.org);  
[David.wright@ladwp.com](mailto:David.wright@ladwp.com); [rhunter@mwdoc.com](mailto:rhunter@mwdoc.com); [gbawa@cityofpasadena.net](mailto:gbawa@cityofpasadena.net);  
[sryan@sdewa.org](mailto:sryan@sdewa.org); [citymanager@sfcity.org](mailto:citymanager@sfcity.org); [garry.hofer@amwater.com](mailto:garry.hofer@amwater.com); [nsaba@ci.santa-ana.ca.us](mailto:nsaba@ci.santa-ana.ca.us);  
[alex.nazarchuk@smgov.net](mailto:alex.nazarchuk@smgov.net); [rhansen@tvmwd.com](mailto:rhansen@tvmwd.com); [Rbeste@TorranceCA.Gov](mailto:Rbeste@TorranceCA.Gov);  
[tom@usgvmwd.org](mailto:tom@usgvmwd.org); [Christy@usgvmwd.org](mailto:Christy@usgvmwd.org); [patrick@westbasin.org](mailto:patrick@westbasin.org); [cmiller@wmwd.com](mailto:cmiller@wmwd.com);  
[vdamasse@beverlyhills.org](mailto:vdamasse@beverlyhills.org); [bmace@ci.burbank.ca.us](mailto:bmace@ci.burbank.ca.us); [MDeGhetto@glendaleca.gov](mailto:MDeGhetto@glendaleca.gov);  
[martin.adams@ladwp.com](mailto:martin.adams@ladwp.com); [dpascarella@cityofpasadena.net](mailto:dpascarella@cityofpasadena.net); [kjones@sfcity.org](mailto:kjones@sfcity.org);  
[cmgr@cityofsanmarino.org](mailto:cmgr@cityofsanmarino.org); [Cschaich@TorranceCA.Gov](mailto:Cschaich@TorranceCA.Gov); [mlitchfield@tvmwd.com](mailto:mlitchfield@tvmwd.com)

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct. Executed on February 6, 2019, at Los Angeles, California.

*Teresa Kirkland*

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Teresa Kirkland