

THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

**RESOLUTION 9204**

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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, 2017**

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WHEREAS, at its meeting on October 16, 2001, the Board of Directors (“Board”) of The Metropolitan Water District of Southern California (“Metropolitan”) approved a rate structure proposal described in Board Letter 9-6 dated October 16, 2001, including a Readiness-To-Serve (“RTS”) Charge; and

WHEREAS, providing firm revenue sources is a goal of such rate structure; and

WHEREAS, the amount of revenue to be raised by the RTS Charge shall be as determined by the Board and allocation of the RTS Charge among member public agencies shall be in accordance with the method established by the Board; and

WHEREAS, the RTS Charge is a charge fixed and adopted by Metropolitan and charged to its member agencies, and is not a fee or charge imposed upon real property or upon persons as an incident of property ownership; and

WHEREAS, Metropolitan has legal authority to fix and adopt such RTS Charge as a water rate pursuant to Sections 133 and 134 of the Metropolitan Water District Act (the “Act”), and to fix it as an availability of service charge pursuant to Section 134.5 of the Act; and

WHEREAS, under authority of Sections 133 and 134 of the Act, the Board has the authority to fix the rate or rates for water as will result in revenue which, together with other revenues, will pay Metropolitan’s operating expenses and provide for payment of other costs, including payment of the interest and principal of Metropolitan’s non-tax funded bonded debt; and

WHEREAS, pursuant to Resolution 8329, adopted by the Board on July 9, 1991, as amended and supplemented, proceeds of the RTS Charge and other revenues from the sale or availability of water are pledged to the payment of Metropolitan’s outstanding revenue bonds and revenue bonds to be issued pursuant to Resolution 8329; and

WHEREAS, under authority of Section 134.5 of the Act, a RTS Charge levied as an availability of service charge may be collected from the member public agencies within Metropolitan, or may continue to be collected as a standby charge against individual parcels within Metropolitan’s service area; and

WHEREAS, certain member public agencies of Metropolitan have opted in prior fiscal years to provide collection of all or a portion of their RTS Charge obligation through a Metropolitan water standby charge (“Standby Charge”) levied on parcels within those member agencies; and

WHEREAS, under authority of Section 134.5 of the Act, the Standby Charge may continue to be levied on each acre of land or each parcel of land less than an acre within Metropolitan to which water is made available for any purpose by Metropolitan, whether the water is actually used or not; and

WHEREAS, Metropolitan is willing to comply with the requests of member public agencies opting to have Metropolitan continue to levy the Standby Charge within their respective territories, on the terms and subject to the conditions contained herein; and

WHEREAS, on February 8, 2016, the General Manager presented to the Finance and Insurance Committee of Metropolitan's Board his proposed biennial budget for fiscal years 2016/17 and 2017/18, determination of total revenues and of revenues to be derived from water sales and firm revenue sources required during the fiscal years 2016/17 and 2017/18; and

WHEREAS, Board workshops and discussions regarding the proposed biennial budget for fiscal years 2016/17 and 2017/18 and water rates and charges for 2017 and 2018 were held on February 8, 2016 and March 7, 2016 at the regularly scheduled Finance and Insurance Committee meetings, and on February 23, 2016 and March 22, 2016 at the Finance and Insurance Committee; and

WHEREAS, the Board conducted a public hearing on its proposed rates and charges for 2017 and 2018 at its regular meeting on March 8, 2016, at which interested parties were given the opportunity to present their views regarding the proposed rates and charges; and

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

WHEREAS, written notice of intention of Metropolitan's Board to consider and take action at its regular meeting to be held April 12, 2016, to adopt Metropolitan's RTS Charge for calendar year 2017 was given to each of Metropolitan's member public agencies; and

WHEREAS, based on the feedback received from board workshops held on February 8, 2016, February 23, 2016, March 7, 2016, and March 22, 2016, and at the public hearing on March 8, 2016, the General Manager proposed rates and charges on April 12, 2016; and

WHEREAS, the supporting cost of service report was provided to the Board on March 16, 2016, was discussed with the Board on March 22, 2016, and an updated cost of service report with minor revisions was provided to the Board on March 30, 2016; and

WHEREAS, on April 12, 2016, the Board considered the rates and charges presented by the General Manager and approved the biennial budget for fiscal years 2016/17 and 2017/18 and adopted recommended water rates and charges for 2017 and 2018; and

WHEREAS, in adopting the rates and charges on April 12, 2016, the Board determined the amount of revenue to be raised by the RTS Charge in 2017 to be \$135,000,000; and

WHEREAS, the RTS Charge applicable to each member public agency, the method of its calculation, and the specific data used in its determination are as specified in the Engineer's Report dated April 2016 (the "Engineer's Report"); and

WHEREAS, the Engineer's Report reflects costs provided in the cost of service report; and

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

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

**Section 1.** That the Board of Directors of Metropolitan hereby fixes and adopts an RTS Charge for the period from January 1, 2017 through December 31, 2017.

**Section 2.** That said RTS Charge shall be in an amount sufficient to provide for payment of debt service and other appropriately allocated costs, for capital expenditures for infrastructure projects needed to provide emergency service and available capacity needs.

**Section 3.** That such RTS Charge for January 1, 2017 through and including December 31, 2017 shall be based on the water rate as specified in Section 5 for the rate option selected by the Board, which shall be charged on a historic basis for each acre-foot of water, excluding water used for purposes of replenishing local storage and agriculture as defined by the Administrative Code, included in Metropolitan's average water deliveries to its member agencies for the applicable ten-year period identified in Section 6 below. The aggregate RTS Charge for the period from January 1, 2017 through and including December 31, 2017 shall be as specified in Section 6.

**Section 4.** That the RTS Charge specified in Table 1 does not exceed the reasonable and necessary cost of providing the service for which the charge, or conferring the benefit provided, is made and is fairly apportioned to each member agency as specified in Section 6 below. Accordingly, the Board finds and determines that the RTS Charge is a reasonable fee charged according to the burden on or benefit from the use of emergency service and available capacity.

**Section 5.** That in the alternative, and without duplication, the RTS Charge shall be an availability of service charge pursuant to Section 134.5 of the Act.

**Section 6.** That the RTS Charge for January 1, 2017 through December 31, 2017 shall be allocated among the member public agencies in proportion to the average of deliveries through Metropolitan's system (in acre-feet) to each member public agency during the ten-year period ending June 30, 2015. Metropolitan sales of reclaimed water under the Local Projects Program, groundwater under the Groundwater Recovery Program, and deliveries under the Replenishment and Interim Agricultural Water Service Programs are not included in the RTS Charge water sales calculation. The allocation of the RTS Charge among member agencies is based on sales data recorded by Metropolitan and shall be conclusive in the absence of manifest error.

The amount of the RTS Charge to be charged to each member public agency effective January 1, 2017, is as follows:

**Table 1**

**Calendar Year 2017 Readiness-To-Serve Charge**

<b>Water rate \$78.74/acre-foot</b>			
<b>Member Agency</b>	<b>Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2005/06 - FY2014/15</b>	<b>RTS Share</b>	<b>12 months @ \$135 million per year (1/17-12/17)</b>
Anaheim	20,890	1.22%	\$ 1,644,773
Beverly Hills	11,386	0.66%	896,470
Burbank	12,817	0.75%	1,009,197
Calleguas MWD	109,124	6.36%	8,592,062
Central Basin MWD	51,539	3.01%	4,058,007
Compton	1,924	0.11%	151,513
Eastern MWD	98,628	5.75%	7,765,612
Foothill MWD	9,790	0.57%	770,791
Fullerton	9,668	0.56%	761,240
Glendale	19,594	1.14%	1,542,739
Inland Empire Utilities Agency	60,811	3.55%	4,788,020
Las Virgenes MWD	22,750	1.33%	1,791,215
Long Beach	34,316	2.00%	2,701,881
Los Angeles	312,096	18.20%	24,573,320
Municipal Water District of Orange County	221,545	12.92%	17,443,662
Pasadena	21,181	1.24%	1,667,686
San Diego County Water Authority	367,123	21.41%	28,905,959
San Fernando	82	0.00%	6,480
San Marino	931	0.05%	73,288
Santa Ana	12,605	0.74%	992,442
Santa Monica	9,252	0.54%	728,501
Three Valleys MWD	65,261	3.81%	5,138,444
Torrance	18,130	1.06%	1,427,500
Upper San Gabriel Valley MWD	22,143	1.29%	1,743,477
West Basin MWD	125,379	7.31%	9,871,876
Western MWD	75,617	4.41%	5,953,847
<b>MWD Total</b>	<b>1,714,580</b>	<b>100.00%</b>	<b>\$ 135,000,000</b>
Totals may not foot due to rounding			

**Section 7.** That the allocation of the RTS Charge among member agencies set forth in Section 6 above is consistent with the per-acre-foot water rates fixed and adopted as set forth in Section 6 above.

**Section 8.** That water conveyed through Metropolitan's system for the purposes of water transfers, exchanges or other similar arrangements shall be included in the calculation of a member agency's rolling ten-year average firm demands used to allocate the RTS Charge.

**Section 9.** That the RTS Charge and the amount applicable to each member public agency, the method of its calculation, and the specific data used in its determination are as specified in the adopted option based on the General Manager's three alternative options on rates and charges to be effective January 1, 2017, which forms the basis of the RTS Charge, and the corresponding cost of service report. The adopted option on rates and charges and cost of service reports are on file and available for review by interested parties at Metropolitan's headquarters.

**Section 10.** That except as provided in Section 12 below with respect to any RTS Charge collected by means of the Standby Charge, the RTS Charge shall be due monthly, quarterly or semiannually as agreed upon by Metropolitan and the member agency.

**Section 11.** That such RTS Charge may, at the request of any member agency which elected to utilize the Standby Charge as a mechanism for collecting the RTS Charge obligation in FY 1996/97, be collected by continuing the Standby Charge at the same rates levied in FY 1996/97 upon land within Metropolitan's (and such member public agency's) service area to which water is made available by Metropolitan for any purpose, whether such water is used or not.

**Section 12.** That the Standby Charge shall be collected on the tax rolls, together with the *ad valorem* property taxes which are levied by Metropolitan for the payment of pre-1978 voter-approved indebtedness. Any amounts so collected shall be applied as a credit against the applicable member agency's RTS Charge obligation. After such member agency's RTS Charge allocation is fully satisfied, any additional collections shall be credited to other outstanding obligations of such member agency to Metropolitan or future RTS Charge obligations of such agency or, if crediting against other outstanding obligations of a member agency to Metropolitan proves to be impracticable, may be transmitted to the member agency for application solely to the cost of capital infrastructure projects of benefit to properties within the member agency. Notwithstanding the provisions of Section 10 above, any member agency requesting to have all or a portion of its RTS Charge obligation collected through Standby Charge levies within its territory as provided herein shall pay any portion not collected through net Standby Charge collections to Metropolitan within 50 days after Metropolitan issues an invoice for remaining RTS Charge obligations for such member agency, as provided in Administrative Code Section 4507.

**Section 13.** That notice is hereby given to the public and to each member public agency of The Metropolitan Water District of Southern California of the intention of Metropolitan's Board to consider and take action at its regular meeting to be held May 10, 2016 (or such other date as the Board shall hold its regular meeting in such month), on the General Manager's recommendation to continue the Standby Charge for FY 2016/17 under authority of Section 134.5 of the Act on land within Metropolitan at the same rates, per acre of land, or per parcel of land less than an acre, levied in FY 1996/97 upon land within Metropolitan's (and such member public agency's) service area. Such Standby Charge will be continued as a means of collecting the RTS Charge.

**Section 14.** That no failure to collect, and no delay in collecting, any Standby Charge shall excuse or delay payment of any portion of the RTS Charge when due. All amounts collected as water standby charges shall be applied solely as credits to the RTS Charge of the applicable member agency, with any excess

collections being carried forward and credited against other outstanding obligations of such member agency to Metropolitan.

**Section 15.** That the RTS Charge is fixed and adopted by Metropolitan as a rate or charge on its member agencies, and is not a fee or charge imposed upon real property or upon persons as incidents of property ownership, and the Standby Charge is collected within the respective territories of electing member agencies as a mechanism for collection of the RTS Charge. In the event that the Standby Charge, or any portion thereof, is determined to be an unauthorized or invalid fee, charge or assessment by a final judgment in any proceeding at law or in equity, which judgment is not subject to appeal, or if the collection of the Standby Charge shall be permanently enjoined and appeals of such injunction have been declined or exhausted, or if Metropolitan shall determine to rescind or revoke the Standby Charge, then no further Standby Charge shall be collected within any member agency and each member agency which has requested continuation of the Standby Charge as a means of collecting its RTS Charge obligation shall pay such RTS Charge obligation in full, as if continuation of such Standby Charge had never been sought.

**Section 16.** That the General Manager and the General Counsel are hereby authorized to do all things necessary and desirable to accomplish the purposes of this Resolution, including, without limitation, the commencement or defense of litigation.

**Section 17** That this Board finds that the RTS Charge and other charges provided in this Resolution are not defined as a project under CEQA because it involves continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed action is not subject to CEQA because it involves other government fiscal activities, which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

**Section 18.** That if any provision of this Resolution or the application to any member agency, property or person whatsoever is held invalid, that invalidity shall not affect other provisions or applications of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

**Section 19.** That the General Manager is hereby authorized and directed to take all necessary action to satisfy relevant statutes requiring notice by mailing or by publication.

**Section 20.** That the Board Executive Secretary is hereby directed to transmit a certified copy of this Resolution to the presiding officer of the governing body of each member public agency.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California, at its meeting held on April 12, 2016.

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

**THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA  
ENGINEER'S REPORT**

**PROGRAM TO LEVY READINESS-TO-SERVE CHARGE,  
INCLUDING LOCAL OPTION FOR STANDBY CHARGE,  
DURING FISCAL YEAR 2016/17**

**April 2016**

**BACKGROUND**

The Metropolitan Water District of Southern California is a public agency with a primary purpose to provide imported water supply for domestic and municipal uses at wholesale rates to its member public agencies. More than 18 million people reside within Metropolitan's service area, which covers over 5,000 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. Metropolitan currently provides over 50 percent of the water used within its service area.

**REPORT PURPOSES**

As part of its role as an imported water supplier, Metropolitan builds capital facilities and implements water management programs that ensure reliable high quality water supplies throughout its service area. The purpose of this report is to: (1) identify and describe those facilities and programs that will be financed in part by Metropolitan's Readiness-to-Serve (RTS) Charge, and (2) describe the method and basis for levying Metropolitan's Standby Charge for those agencies electing to collect a portion of their RTS obligation through Metropolitan's Standby Charge in fiscal year 2016/17. **Because the Standby Charge is levied and collected on a fiscal year basis the calculations in this report also are for the fiscal year, even though the RTS Charge is levied on a calendar year basis.** The RTS Charge for calendar year 2016 was adopted by Metropolitan's Board on April 14, 2015 and the RTS Charge for 2017 will be considered by the Board on April 12, 2016.

Metropolitan levies the RTS Charge on its member agencies to recover a portion of the debt service on bonds issued to finance capital facilities needed to meet existing demands on Metropolitan's system. The Standby Charge is levied on parcels of land within certain of Metropolitan's member agencies as a method of collecting part or all of such member agency's RTS Charge obligation. The RTS Charge will partially pay for the facilities and programs described in this report. The Standby Charge, if levied, will be utilized solely for capital payments and debt service on the capital facilities identified in this report.

**METROPOLITAN'S RESPONSE TO FLUCTUATING WATER DEMANDS**

To respond to fluctuating demands for water, Metropolitan and its member agencies collectively examined the available local and imported resource options in order to develop a cost-effective plan that meets the reliability and quality needs of the region. The product of this intensive effort was an Integrated Resources Plan (IRP) for achieving a reliable and affordable water supply for Southern California. The major objective of the IRP was to develop a comprehensive water resources plan that ensures (1) reliability, (2) affordability, (3) water quality, (4) diversity of supply, and (5) adaptability for the region, while recognizing the environmental, institutional, and political constraints to resource development. As these constraints change over time, the IRP is periodically revisited and updated by Metropolitan and the member agencies to reflect current conditions. To meet the water supply needs of existing and future customers within its service area, Metropolitan continues to identify and develop additional water supplies to maintain the reliability of the imported water supply and delivery system. These efforts include the construction of capital facilities and implementation of demand management programs.

## **Capital Facilities**

The capital facilities include the State Water Project (SWP), the Colorado River Aqueduct (CRA), storage facilities including Diamond Valley Lake (DVL), and additional conveyance and distribution system components. The benefits of these capital facilities are both local and system-wide, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area.

### State Water Project Benefits

In 1960, Metropolitan contracted with the California Department of Water Resources (DWR) to receive SWP supplies. Under this contract, Metropolitan is obligated to pay its portion of the construction and operation and maintenance costs of the SWP system through at least the year 2035, regardless of the quantities of project water Metropolitan takes. Metropolitan is entitled to 1.9 million acre-feet of the total SWP contract amounts of 4.2 million acre-feet. All Metropolitan member agencies benefit from the SWP supplies, which are distributed to existing customers and are available to future customers throughout Metropolitan's service area. The potential benefit of the SWP allocable to the RTS Charge in fiscal year 2016/17 is shown in Table 1.

### System Storage Benefits

The Metropolitan system, for purposes of meeting demands during times of shortage, regulating system flows, and to ensure system reliability in the event of a system outage, provides over 1,000,000 acre-feet of system storage capacity. DVL provides 800,000 acre-feet of storage capacity for water from the Colorado River Aqueduct and SWP, effectively doubling Southern California's previous surface water storage capacity. Water stored in system storage during above average supply conditions (surplus) provides a reserve against shortages when supply sources are limited or disrupted. System storage also preserves Metropolitan's capability to deliver water during scheduled maintenance periods, when conveyance facilities must be removed from service for rehabilitation, repair, or maintenance. The potential benefit of system storage in fiscal year 2016/17 is shown in Table 1.

### Conveyance and Distribution System Benefits

Metropolitan has an ongoing commitment, through physical system improvements and the maintenance and rehabilitation of existing facilities, to maintain the reliable delivery of water throughout the entire service area. System improvement projects include additional conveyance and distribution facilities to maintain the dependable delivery of water supplies, provide alternative system delivery capacity, and enhance system operations. Conveyance and distribution system improvement benefits also include projects to upgrade obsolete facilities or equipment, or to rehabilitate or replace facilities or equipment. These projects are needed to enhance system operations, comply with new regulations, and maintain a reliable distribution system. A list of conveyance and distribution system facilities is provided in Table 3 along with the fiscal year 2016/17 estimated conveyance and distribution system benefits.

## **Demand Management Program Benefits**

Demand management programs that could be financed by the RTS Charge and standby charge include Metropolitan's participation in providing financial incentives to local agencies for the construction and development of local resource programs and conservation projects. Investments in demand side management programs like conservation, water recycling and groundwater recovery conserve and produce local supplies, reducing the need to provide additional imported water supplies and reducing demands on Metropolitan's system, thus helping to avoid and defer the need for additional conveyance, distribution, and storage facilities and reducing maintenance of those facilities. A summary of the estimated benefits of the demand management

programs as measured by Metropolitan's anticipated expenditures for these programs in fiscal year 2016/17 is shown in Table 1.

### Local Resources Program

In 1982, Metropolitan's Board adopted the Local Resources Program (LRP) with the goal of developing local water resources in a cost-efficient manner. Financial incentives are provided to member agency-sponsored projects that best help the region achieve its local resource production goals of restoring degraded groundwater resources for potable use as well as developing recycled water and seawater desalination supplies. These projects provide new water supplies, which help avoid and defer the need for additional regional conveyance, distribution and storage facilities and reduce maintenance of those facilities.

Combined production from participating recycling and groundwater recovery projects produced approximately 242,000 acre-feet of water in fiscal year 2014/15 with financial incentive payments of about \$38 million. Regional recycling, recovered groundwater, and desalinated seawater production are projected to be about 669,000 acre-feet per year, by year 2025. An estimate of potential benefits as measured by Metropolitan's estimated incentive payments for recycling and groundwater recovery projects is shown in Table 2.

### Water Conservation

Metropolitan actively promotes water conservation programs within its service area as a cost-effective strategy for ensuring the long-term reliability of supplies and as a means of reducing the need to expand and maintain system conveyance, distribution and treatment capacity. Through the Conservation Credits Program, Metropolitan reimburses local agencies for a share of their costs of implementing conservation projects. Since fiscal year 1990/91, Metropolitan has spent over \$495 million in financial incentives to support local conservation projects.

In 1991, Metropolitan agreed to implement conservation "Best Management Practices" (BMPs). By signing the California Urban Water Conservation Council's *Memorandum of Understanding Regarding Urban Water Conservation* (amended March 10, 2004), Metropolitan committed to implement proven and reliable water conserving technologies and practices within its jurisdiction. Based on Metropolitan's IRP, the Conservation Credits Program, in conjunction with plumbing codes and other conservation efforts, has saved over 2,222,000 acre-feet since inception through fiscal year 2014/15. In order to comply with the Governor's mandate of reducing demand by 20 percent by the year 2020, Metropolitan is working on increasing its conservation efforts in the next ten years to meet that request. Conservation is a critical element of Metropolitan's demand management program, effectively increasing the reliability of existing water supplies by lessening the need to import additional water while at the same time avoiding and deferring the need to expand system capacity and reducing maintenance of the system. An estimate of the potential benefits of water conservation projects as measured by Metropolitan's incentive payments is given in Table 2.

## **LONG-RANGE FINANCIAL PLANNING**

Metropolitan's major capital facilities are financed largely from the proceeds of revenue bond issues, which are repaid over future years. The principal source of revenue for repayment of these bonds is water sales, which is currently Metropolitan's largest source of revenue. In addition, *ad valorem* property taxes provide an additional limited revenue source, which is used to pay pre-1978 voter-approved indebtedness.

Since the passage of Article XIII A of the California Constitution, Metropolitan has necessarily relied more on water sales revenue than on *ad valorem* property taxes for the payment of debt. Water sales have become the dominant source of revenue, not only for operation and maintenance of the vast network of facilities supplying water to Southern California, but also for replacement and improvement of capital facilities.

The increased reliance on highly variable water sales revenue increases the probability of substantial rate swings from year to year mainly resulting from changing weather patterns. The use of water rates as a primary source of revenue has placed an increasing burden on ratepayers, which might more equitably be paid in part by assessments on land that in part derives its value from the availability of water. In December 1993, Metropolitan's Board approved a revenue structure that included additional charges to establish a commitment to Metropolitan's capital improvement program and provide revenue stability. This revenue structure included the RTS Charge.

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

As noted above, Metropolitan levies the RTS Charge on its member agencies to recover capital costs, including a portion of the debt service on bonds issued to finance capital facilities needed to meet existing demands on Metropolitan's system. The estimated potential benefits that could be paid by an RTS charge in fiscal year 2016/17 exceed \$406 million as shown in Table 1.

Although the RTS Charge could be set to recover the entire potential benefit amount, the General Manager is recommending that the RTS Charge only recover a portion of the total potential benefit. For fiscal year 2016/17, the amount of the total potential benefit to be recovered by the RTS Charge is estimated to be \$144,000,000. These funds, when combined with Metropolitan's overall financial resources, will result in greater water rate stability for all users throughout Metropolitan's service area. Consistent with the rate structure approved by the Board in October of 2001, the RTS Charge for fiscal year 2016/17 is allocated to each member agency on the basis of a ten-year rolling average of historic water purchases from Metropolitan ending June 30, 2015. This average includes all deliveries used to meet firm demand (consumptive municipal industrial demands), including water transfers and exchanges. The estimated fiscal year 2016/17 RTS Charge for each member agency is shown in Table 4.

### **Standby Charge Option**

Metropolitan's Standby Charge is authorized by the State Legislature and has been levied by Metropolitan since fiscal year 1992/93. The Standby Charge recognizes that there are economic benefits to lands that have access to a water supply, whether or not such lands are using it. Utilization of the Standby Charge transfers some of the burden of maintaining Metropolitan's capital infrastructure from water rates and *ad valorem* taxes to all the benefiting properties within the service area. A fraction of the value of this benefit and of the cost of providing it can be effectively recovered, in part, through the levying of a standby charge. The projects to be supported in part by a Standby Charge are capital projects that provide both local and Metropolitan-wide benefit to current landowners as well as existing water users. The estimated potential benefits system-wide are several times the amount to be recovered by means of the Standby Charge.

Metropolitan will levy Standby Charges only within the service areas of the member agencies that request that the standby charge be utilized. The Standby Charge for each acre or parcel of less than an acre will vary from member agency to member agency, as permitted under the legislation establishing Metropolitan's Standby Charge. The water Standby Charge for each member agency will be the same as that levied by Metropolitan in fiscal year 1996/97 and is shown in Table 5.

The proposed Standby Charge includes the re-levying of water standby charges on: (1) parcels on which water standby charges have been levied in fiscal year 1996/97 and annually thereafter ("pre-1997 standby charges") and (2) parcels annexed to Metropolitan and to an electing member agency after January 1997 ("annexation standby charges"). Only land within member agencies which Standby Charges were levied in fiscal year 1996/97 will be subject to the re-levying of pre-1997 Standby Charges for FY 2016/17. Only land annexed to Metropolitan and to an electing member public agency with respect to which standby charges were approved in accordance with the procedures of Article XIID, Section 4 of the California Constitution will be subject to the levying or re-levying,

as applicable, of annexation standby charges for fiscal year 2016/17. Table 6 lists parcels annexed, or to be annexed, to Metropolitan and to electing member agencies during FY 2016/17, such parcels being subject to the annexation standby charge upon annexation. Parcels annexed prior to FY 2016/17 are subject to annexation standby charges as described in the Engineer's Report for the fiscal year of their annexation. These parcels and parcels that are subject to the pre-1997 standby charges are identified in a listing filed with the Executive Secretary.

The estimated potential benefits of Metropolitan's water supply program, which could be paid by a Standby Charge, exceed \$406 million for fiscal year 2016/17, as shown in Table 1. An average total Standby Charge of about \$93.53 per acre of land or per parcel of less than one acre would be necessary to pay for the total potential program benefits. Benefits in this amount will accrue to each acre of property and parcel within Metropolitan, as these properties are eligible to use water from the Metropolitan system. Because only properties located within Metropolitan's boundaries may receive water supplies from Metropolitan (except for certain contractual deliveries as permitted under Section 131 of the Metropolitan Water District Act), any benefit received by the public at large or by properties outside of the proposed area to be annexed is merely incidental.

Table 5 shows that the distribution of Standby Charge revenues from the various member agencies would provide net revenue flow of approximately \$43.6 million for fiscal year 2016/17. This total amount is less than the estimated benefits shown in Table 1. Metropolitan will use other revenue sources, such as water sales revenues, RTS Charge revenues (except to the extent collected through standby charges, as described above), interest income, and revenue from sales of hydroelectric power, to pay for the remaining program benefits. Thus, the benefits of Metropolitan's investments in water conveyance, storage, distribution, and demand management programs far exceed the recommended standby charge.

## **Equity**

The RTS Charge is a firm revenue source. The revenues to be collected through this charge will not vary with sales in the current year. This charge is levied on Metropolitan's member agencies and is not a fee or charge upon real property or upon persons as an incident of property ownership. It ensures that agencies that only occasionally purchase water from Metropolitan but receive the reliability benefits of Metropolitan's system pay an equitable share of the costs to provide that reliability. Within member agencies that elect to pay the RTS Charge through Metropolitan's standby charges, the Standby Charge results in lower water rates than would otherwise be necessary due to the amount of revenue collected from lands which benefit from the availability of Metropolitan's water supply. With the Standby Charge, these properties are now contributing a more appropriate share of the cost of importing water to Southern California and delivering water.

Metropolitan's water supply program increases the availability and reliable delivery of water throughout Metropolitan's service area. Increased water supplies benefit existing consumers and land uses through direct deliveries to consumers and properties, and through the replenishment of groundwater basins and reservoir storage as reserves against shortages due to droughts, natural emergencies, or scheduled facility shutdowns for maintenance. The benefits of reliable water supplies from the SWP, CRA, DVL, and system improvements accrue to more than 250 cities and communities within Metropolitan's six-county service area. Metropolitan's regional water system is interconnected, so water supplies from the SWP and CRA can be used throughout most of the service area and therefore benefit water users and properties system-wide.

Additional Metropolitan deliveries required in the coming fiscal year due to the demands of property development will be reduced by the implementation of demand management projects, including water conservation, water recycling, and groundwater recovery projects. As with the SWP, CRA and DVL and the conveyance and distribution facilities, demand management programs increase the future reliability of water supplies. In addition, demand management programs provide system-wide benefits by effectively decreasing the demand for imported water, which helps to avoid and defer construction of additional system conveyance and distribution capacity and

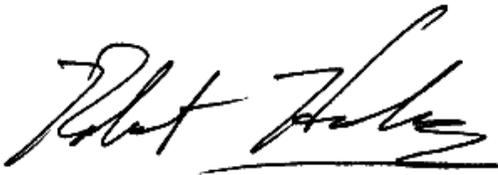
reduce maintenance of the system. However, the abilities of each member agency to implement these projects under Metropolitan's financial assistance programs vary, depending on local conditions.

A major advantage of a firm revenue source, such as a RTS charge, is that it contributes to revenue stability during times of drought or low water sales. It affords Metropolitan additional security, when borrowing funds, that a portion of the revenue stream will be unaffected by drought or by rainfall. This security will help maintain Metropolitan's historically high credit rating, which results in lower interest expense to Metropolitan, and therefore, lower overall cost to the residents of its service area.

### SUMMARY

The foregoing and the attached tables describe the current benefits provided by the projects listed as mainstays to the water supply system for Metropolitan's service area. Benefits are provided to both water users and property owners. The projects represented by this report provide both local benefits as well as benefits throughout the entire service area. It is recommended, for fiscal year 2016/17, that the RTS Charge be levied with an option for local agencies to request that a Standby Charge be levied on lands within Metropolitan's service area as a credit against such member agency's RTS Charge, up to the Standby Charge per acre or parcel of less than one acre levied by Metropolitan within the applicable member agency for fiscal year 2016/17. The maximum Standby Charge would not exceed \$15 per acre of land or per parcel of less than one acre. The benefits described in this Engineer's Report exceed the recommended charge. A listing of all parcels in the service area and the proposed 2016/17 Standby Charge for each is available in the office of the Chief Financial Officer.

Prepared Under the Supervision of:



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Unit Manager V  
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Prepared Under the Supervision of:



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**TABLE 1**

**ESTIMATED DISTRIBUTION OF BENEFITS OF CONVEYANCE, STORAGE, AND DISTRIBUTION INFRASTRUCTURE,  
AND DEMAND MANAGEMENT PROGRAMS THAT COULD BE PAID BY RTS CHARGE**

<b>Water Conveyance, Storage, Distribution and Demand Management Programs</b>	<b>Estimated Potential Program Benefits for FY2016/17</b>	<b>Dollars Per Parcel of 1 Acre or Less</b>
Net Capital Payments to State Water Project (less portion paid by property taxes)	\$ 70,246,879	\$16.18
Non Tax Supported Capital Costs for System Storage <sup>1</sup>	\$ 104,831,896	\$24.14
Non Tax Supported Capital Costs for Conveyance and Distribution System <sup>2</sup>	\$ 155,929,608	\$35.91
<b>Sub-Total Capital Payments</b>	<b>\$ 331,008,383</b>	<b>\$76.23</b>
less Estimated Standby Charge Revenues	\$ (43,624,493)	(\$10.05)
Remaining capital payments	\$ 287,383,889	\$66.18
<b>Demand Management Programs: Water Recycling, Groundwater Recovery, and Water Conservation Projects</b>	<b>\$ 75,129,611</b>	<b>\$17.30</b>
Sub-Total Capital Financing and Demand Management Programs Costs not Paid by Standby Charge Revenues	\$ 362,513,501	\$83.48
<b>Total Benefits: Capital Financing and Demand Management Programs</b>	<b>\$ 406,137,994</b>	<b>\$93.53</b>

**Notes:**

[1] System storage includes Diamond Valley Lake, Lake Mathews, Lake Skinner and several other smaller surface reservoirs which provide storage for operational purposes.

[2] Conveyance and Distribution facilities include the Colorado River Aqueduct and the pipelines, laterals, feeders and canals that distribute water throughout the service area.

Totals may not foot due to rounding

**TABLE 2**

**WATER RECYCLING, GROUNDWATER RECOVERY  
AND CONSERVATION PROJECTS**

<b>Project Name</b>	<b>FY 2016/17 Payment</b>
<b>Water Recycling Projects</b>	<b>\$32,793,981</b>
Advanced Water Purification Facility Project	
Alamitos Barrier Reclaimed Water Project	
Anaheim Water Recycling Demonstration Project	
Burbank Reclaimed Water System Expansion Proj.	
Burbank Recycled Water System Expansion - Phase 2	
Capistrano Valley Non-Domestic Water System Expansion	
City of Industry Regional Water System - Rowland	
City of Industry Regional Water System - USGVMWD	
City of Industry Regional Water System - walnut	
Development of Non-Domestic Water Sys. Exp. Ladera	
Direct Reuse Project Phase IIA	
Dry Weather Runoff Reclamation Facility	
Eastern Recycled Water Expansion Project	
Eastern Recycled Water Pipeline Reach 16	
Eastern Regional Reclaimed Water System	
El Toro Recycled Water Expansion	
Encina Basin Water Rec. Prog - Phases I and II (5)	
Escondido Regional Reclaimed Water Project	
EVMWD Recycled Water Program	
Glendale Verdugo-Scholl Canyon Recl. Water Proj. (4)	
Glendale Water Reclamation Expansion Project	
Green Acres Reclamation Project - Coastal	
Green Acres Reclamation Project - MWDOC	
Green Acres Reclamation Project - Santa Ana	
Groundwater Replenishment System Talbert Seawater Intrusion Barrier Component	
Hansen Area Water Recycling Project Phase 1	
Hansen Dam Golf Course Water Recycling Project	
Harbor Refineries Recycled Water Project	
Harbor Water Recycling Project	
IEUA Regional Recycled Water Dist. System	
IRWD Recycled Water System Upgrade	
Leo J. Vander Lanz (Alamitos Barrier Expansion)	
Long Beach Reclamation Expansion Phase I	
Los Angeles Taylor Yard Park	
Moulton Niguel Reclamation Project	

TABLE 2 (Continued)

WATER RECYCLING, GROUNDWATER RECOVERY  
AND CONSERVATION PROJECTS

Project Name	FY 2016/17 Payment
<b>Water Recycling Projects (continued)</b>	
North Atwater, Chevy Chase Park, Los Felis Water Recycling Project	
North City Water Reclamation Project	
Oceanside Water Reclamation Project	
Olivenhain Recycled Project - SE Quadrant	
Otay Recycled Water System	
Padre Dam Reclaimed Water System Phase I	
Ramona/Santa Maria Water Reclamation Project	
Rancho California Reclamation Expansion	
Reclaimed Project at Century and Rio Hondo	
San Clemente Recycled Water System Expansion	
San Clemente Water Reclamation Project	
San Elijo Water Reclamation System	
Sepulveda Basin Water Recycling Project Phase IV	
South Griffith Park Recycled Water Project	
Trabuco Canyon Reclamation Expansion Project	
Van Nuys Area Water Recycling Project	
West Basin Water Reclamation Program	
West Basin Water Recycling Phase V Expansion Project	

**TABLE 2 (Continued)**

**WATER RECYCLING, GROUNDWATER RECOVERY  
AND CONSERVATION PROJECTS**

<b>Project Name</b>	<b>FY 2016/17 Payment</b>
<b>Groundwater Recovery Projects</b>	<b>\$10,933,130</b>
Beverly Hills Desalter	
Cal Poly Pomona Water Treatment Plant	
Capistrano Beach Desalter	
Chino Basin Desalination Program / IEUA	
Chino Basin Desalination Program / Western	
Irvine Desalter	
IRWD Wells 21 and 22	
Lower Sweetwater Desalter Phase 1	
Madrona Desalter (Goldsworthy)	
Menifee Basin Desalter	
Mesa Consolidated Colored Water Treatment Facility	
Oceanside Desalter Phase I and II (1)	
Pomona Well # 37	
Round Mountain Water Treatment Plant	
San Juan Desalter	
Temescal Basin Desalting Facility	
<b>Future Supply Actions</b>	<b>\$4,402,500</b>
<b>Conservation Projects</b>	<b>\$27,000,000</b>
Regionwide Residential	
Regionwide Commercial	
Member Agency Administered/MWD Funded	
Water Incentive Savings Program	
Grants Programs - Weather Based Irrigation Controllers	
<b>Total Demand Management Programs</b>	<b>\$75,129,611</b>

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

**Description**

**Storage Facilities**

GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER  
 102677 - JENSEN, REPAIR COVER OVER RESERVOIR 1  
 ALAMEDA CORRIDOR, PIPELINE RELOCATION, PROTECTION  
 CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000-LIVE OAK  
 CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000-MORRIS DAM  
 CHINO BASIN GROUNDWATER SERVICE CONNECTION CB-15T  
 CHLORINATION AND PH CONTROL FACILITIES- ORANGE COUNTY & GARVEY (50/50)  
 CLEARING OF LAKE MATHEWS RESERVOIR AREA  
 CONVERSION OF DEFORMATION SURVEY MONITORING AT COPPER BASIN  
 COPPER BASIN AND GENE WASH DAM, INSTALL SEEPAGE ALARM (50/50)  
 COPPER BASIN RESERVOIR SUPERVISORY CONTROL  
 COPPER BASIN SEWER SYSTEM  
 CORONA DEL MAR RESERVOIR- REPLENISHMENT  
 CORONA DEL MAR RESERVOIR- CHLORINATION STATION  
 CRANE - LAKE MATHEWS OUTLET TOWER (ORG CONST)  
 DIAMOND VALLEY LAKE, CAL PLAZA CHARGES  
 DIAMOND VALLEY LAKE, CONSULTANT COSTS  
 DIAMOND VALLEY LAKE, DAM DEFORMATION MONITORING  
 DIAMOND VALLEY LAKE, EAST DAM SUMP PUMP ELECTRICAL STUDY  
 DIAMOND VALLEY LAKE, GENERAL CONSTRUCTION MGMT, 2000-2001  
 DIAMOND VALLEY LAKE, INUNDATION MAPS  
 DIAMOND VALLEY LAKE, UNDERGROUND TANK CLOSURE  
 DIAMOND VALLEY RECREATION, EAST MARINA  
 DIAMOND VALLEY RECREATION, FISHERY  
 DIAMOND VALLEY RECREATION, MUSEUM FOUNDATION REHABILITATION  
 DIAMOND VALLEY RECREATION, SEARL PARKWAY IMPROVEMENTS, PHASE I  
 DIAMOND VALLEY TRAILS PROGRAM, TRAILS  
 DISTRICT DESIGN AND INSPECTION - MORRIS DAM  
 DISTRICT RESERV. AQUEOUS AMMONIA FEED SYSTEM  
 DISTRICT RESERVOIR - LONGTERM CHEMICAL FAC CONTAINMENT  
 DOMESTIC WATER SUPPLY - LAKE MATHEWS (ORG CONST)  
 DOMESTIC WATER SYSTEM - LAKE MATHEWS (ORG CONST)  
 DOMESTIC WATER SYSTEM-PALOS VERDES RESERVOIR (INTERIM CONST)  
 DVL - SEARL PARKWAY EXTENSION - PHASE 2  
 DVL - SEARL PARKWAY LANDSCAPING  
 DVL RECREATION - ALTERNATE ACCESS ROAD  
 DVL RECREATION, COMMUNITY PARK AND REGIONAL AQUATIC FACILITY  
 DVL SECURITY ENHANCEMENT  
 DVL, CONSTRUCTION  
 DVL, CONSTRUCTION CLAIMS SUPPORT  
 DVL, CONSTRUCTION MANAGEMENT SERVICE  
 DVL, CONSTRUCTION SUPERVISION  
 DVL, CONSTRUCTION, WEST DAM FOUNDATION  
 DVL, DEDICATION CEREMONY  
 DVL, DISTURBED  
 DVL, DOMENIGONI PARK  
 DVL, EAST DAM  
 DVL, EAST DAM EMBANKMENT  
 DVL, EAST DAM FENCING  
 DVL, EAST DAM INLET OUTLET TOWER CONSTRUCTION  
 DVL, EAST DAM LANDSCAPE SCREENING  
 DVL, EAST DAM NORTH RIM REMEDIATION  
 DVL, EAST DAM P-1 FACILITIES  
 DVL, EAST DAM SITE COMPLETION  
 DVL, EAST DAM STATE STREET IMPROVEMENTS  
 DVL, EAST DAM VERTICAL SLEEVE VALVE  
 DVL, EAST MARINA, PHASE 2  
 DVL, EXCAVATION  
 DVL, FIXED CONE, SPHERE  
 DVL, GENERAL  
 DVL, GRADING OF CONT  
 DVL, INSTALL NEW WATERLINE  
 DVL, MISC SMALL CONS  
 DVL, NORTH HIGH WATER ROAD  
 DVL, P-1 PUMPING FACILITY  
 DVL, PROCUREMENT  
 DVL, SCOTT ROAD EXTENSION  
 DVL, SOUTH HIGH WATER ROAD & QUARRY  
 DVL, SPILLWAY  
 DVL, START UP  
 DVL, VALLEY-WIDE SITE ROUGH GRADING  
 DVL, WORK PACKAGE  
 DVL, WORK PACKAGE 1  
 DVL, WORK PACKAGE 10, INLET OUTLET WORK  
 DVL, WORK PACKAGE 11, FOREBAY  
 DVL, WORK PACKAGE 12, TUNNEL  
 DVL, WORK PACKAGE 13, P-1 PUMP OPERATIONS FACILITY  
 DVL, WORK PACKAGE 14, PC-1  
 DVL, WORK PACKAGE 15, SITE CLEARING  
 DVL, WORK PACKAGE 16, GROUNDWATER MONITORING  
 DVL, WORK PACKAGE 17, FIELD OFFICE  
 DVL, WORK PACKAGE 18, TEMPORARY VISITOR CENTER  
 DVL, WORK PACKAGE 19, PERMANENT VISITOR CENTER  
 DVL, WORK PACKAGE 2, EASTSIDE PIPELINE  
 DVL, WORK PACKAGE 20, EAST DAM EXCAVATION, FOUNDATION  
 DVL, WORK PACKAGE 21, WEST DAM EXCAVATION, FOUNDATION  
 DVL, WORK PACKAGE 23, WEST RECREATION AREA  
 DVL, WORK PACKAGE 24, EAST RECREATION AREA  
 DVL, WORK PACKAGE 25, EXCAVATION  
 DVL, WORK PACKAGE 26, ELECTRICAL TRANSMISSION LINES  
 DVL, WORK PACKAGE 27, MAJOR EQUIPMENT P-1  
 DVL, WORK PACKAGE 28, MAJOR EQUIPMENT, GATES  
 DVL, WORK PACKAGE 29, MAJOR EQUIPMENT, PC-1  
 DVL, WORK PACKAGE 30, INSTRUMENTATION AND CONTROL SYSTEMS  
 DVL, WORK PACKAGE 31, GEOGRAPHICAL INFO  
 DVL, WORK PACKAGE 32, PERMIT  
 DVL, WORK PACKAGE 33, MAJOR EQUIPMENT, VALVES

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

**Description**

**Storage Facilities**

DVL, WORK PACKAGE 34, EMERGENCY RELEASE  
DVL, WORK PACKAGE 35  
DVL, WORK PACKAGE 36, TRANSMISSION LINE TO PC-1  
DVL, WORK PACKAGE 38, RUNOFF EROSION  
DVL, WORK PACKAGE 39, SADDLE DAM FOUNDATION  
DVL, WORK PACKAGE 4, NEWPORT ROAD RELOCATION  
DVL, WORK PACKAGE 40  
DVL, WORK PACKAGE 42, GEOTECHNICAL  
DVL, WORK PACKAGE 43, MOBILIZATION  
DVL, WORK PACKAGE 44, SITE DEVELOPMENT  
DVL, WORK PACKAGE 47, HAZARDOUS MATERIAL  
DVL, WORK PACKAGE 48, GENERAL ADMIN  
DVL, WORK PACKAGE 49  
DVL, WORK PACKAGE 5, SALT CREEK FLOOD CONTROL  
DVL, WORK PACKAGE 52, HISTORY ARCHEOLOGY INVENTORY  
DVL, WORK PACKAGE 53, PREHISTORIC ARCHEOLOGY  
DVL, WORK PACKAGE 54, PLANTS, WILDLIFE  
DVL, WORK PACKAGE 55, AIR QUALITY, NOISE  
DVL, WORK PACKAGE 6, SURFACE WATER MITIGATION  
DVL, WORK PACKAGE 7, DESIGN WEST DAM ACCESS  
DVL, WORK PACKAGE 8, DESIGN EAST DAM ACCESS  
DVL, WORK PACKAGE 9, SADDLE DAM  
DVL, WORKING INVENTORY, 80,000 ACRE FEET (10% OF CAPACITY)  
EAST DAM TUNNELS  
EAST MARINA BOAT RAMP EXTENSION  
ELECTRICAL SERVICE - LAKE MATHEWS (ORG CONST)  
ELECTRICAL SYSTEM - LAKE MATHEWS (ORG CONST)  
FIRST SAN DIEGO AQUEDUCT - REPLACE PIPELINE SECTION BOTH BARRELS  
FLOATING BOAT HOUSE - LAKE MATHEW  
FLOOD RELEASE VALVE, MORRIS DAM & WATER SUPPLY SYSTEM,PV RESER.  
FOOTBRIDGE - LAKE MATHEWS (ORG CONST)  
FOOTHILL FEEDER- LIVE OAK RESERVOIR- CLAIMS  
FOOTHILL FEEDER- LIVE OAK RESERVOIR- RESIDENCE  
GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER  
GARVEY RESERVIOR OPERATION & MAINTENANCE CENTER (RETIREMENT)  
GARVEY RESERVOIR - JUNCTION STRUCTURE,REPLACE VALVE # 1  
GARVEY RESERVOIR- EMERGENCY GENERATOR  
GARVEY RESERVOIR- FLOATING COVER  
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1  
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1 - INTEREST  
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVES # 4 & 5  
GARVEY RESERVOIR- MODIFY DESILTING BASINS  
GARVEY RESERVOIR REPAIR  
GARVEY RESERVOIR, LOWER ACCESS ROAD, PAVING & DRAINS  
GARVEY RESERVOIR, REPLACE VALVE # 4 & 5  
GARVEY RESERVOIR, TWO VALVES AT JUNCTION STRUCTURE  
GARVEY RESERVOIR: CONT. 565, SPEC.412  
GARVEY RESERVOIR: TWO COTTAGES WITH GARAGES  
GARVEY RESERVOIR-HYPOCHLORINATION  
GARVEY RESERVOIR-HYPOCHLORINE STATION  
GARVEY RESERVOIR-INLET AND OUTLET CONDUIT SYSTEM MODIFICATION  
GARVEY RESEVOIR-JUNCTION STRUCTURE REPLACE TWO VALVES  
GARVEY RSVR REPLACE VENTURI THROAT SECTION  
GARVEY RSVR--REPLACE CENETRUI THROAT SECTION  
HEADWORKS OF DISTRIBUTION SYSTEM LAKE MATHEWS  
HEADWORKS: ADDITIONAL VALVES  
HEADWORKS: MOTOR OPERATED SLIDE GATES  
HOUSE AND GARAGE AT CORONA DEL MAR RESERVOIR  
HOUSE AND GARAGE AT ORANGE COUNTY RESERVOIR  
HOUSE AT PALOS VERDES RESERVOIR  
HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1939  
HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1955  
IOC - DIAMOND VALLEY LAKE  
IOC - DIEMER, RESERVOIR SEISMIC UPGRADES  
IOC - GARVEY RESERVOIR REPAIR  
IOC - GARVEY RESERVOIR, HYPOCHLORINATION SYSTEM  
IOC - LAKE MATHEWS OUTLET FACILITIES  
IOC - LAKE MATHEWS WATERSHED  
IOC - LAKE SKINNER BYPASS PIPELINE #2 AND #3  
IOC - ORANGE COUNTY RSVR, REPLACE CHLORINATION SYSTEM  
IOC - PALOS VERDES RSVR, REPLACE CHLORINATION SYSTEM  
LAKE MATHEWS - REPLACE STANDBY GENERATOR  
LAKE MATHEWS - ELECTRICAL SYSTEM IMPROVEMENT  
LAKE MATHEWS BUILDING  
LAKE MATHEWS BUILDINGS 8 & 15, RENOVATION OF ASSEMBLY AREA AND ADMIN. BLDG.  
LAKE MATHEWS- CARPENTER AND VEHICLE MAINTENANCE BUILDING  
LAKE MATHEWS- CHLORINATION FACILITIES  
LAKE MATHEWS CHLORINATION FACILITY- REPLACE CHLORINATION EQPMT.  
LAKE MATHEWS CNTRL TOWER-REPL. 45 30-INCH GATE/BUTTERFLY VALVES  
LAKE MATHEWS CONTROL TOWER - REPLACE 45 10-INCH GATE VALVE  
LAKE MATHEWS DIKE  
LAKE MATHEWS DIVERSION TUNNEL  
LAKE MATHEWS DIVERSION TUNNEL WALKWAY REPAIR  
LAKE MATHEWS- DOCK AND BOAT SHELTER  
LAKE MATHEWS DOMESTIC FACILITIES  
LAKE MATHEWS- DOMESTIC WATER SYSTEM  
LAKE MATHEWS- ELECTRICAL SYSTEM IMPROVEMENT  
LAKE MATHEWS- EMERGENCY GENERATOR  
LAKE MATHEWS ENLARGEMENT (SPEC NO. 505)  
LAKE MATHEWS FOREBAY OUTLET STRCTR-REPL.CONCRETE BLOCK BLDG  
LAKE MATHEWS FOREBAY OUTLET, CONCRETE BLDG  
LAKE MATHEWS FOREBAY- REPLACE FOOTBRIDGE  
LAKE MATHEWS HEADWORKS-INSTALL AIR MTRS,3 HOWELL BNGR VALVE OP.  
LAKE MATHEWS- HOUSE AND GARAGE  
LAKE MATHEWS- IMPROVE MAIN SUBSTATION  
LAKE MATHEWS- IMPROVEMENT OF DOMESTIC WATER & FIRE PROT. SYSTEM  
LAKE MATHEWS -LUMBER STORAGE BUILDING

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

**Description**

**Storage Facilities**

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 OULET FACILITIES  
 LAKE MATHEWS OULET TOWER- REPLACE CRANES  
 LAKE MATHEWS OULET TOWER-REPLACE GATE VALVES  
 LAKE MATHEWS OULET TOWER-REPLACE GATE VALVES (RETIREMENT)  
 LAKE MATHEWS OULET TUNNEL  
 LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER  
 LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER - INTEREST  
 LAKE MATHEWS- PROPANE STORAGE TANK  
 LAKE MATHEWS- PROPANE STORAGE TANK - INTEREST  
 LAKE MATHEWS- REPLACE HOWELL-BUNGER VALVE OPERATORS  
 LAKE MATHEWS- REPLACE VALVES  
 LAKE MATHEWS RESERVOIR - RELOCATE SOUTHERLY SECURITY FENCE  
 LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE  
 LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE - INTEREST  
 LAKE MATHEWS- SEEPAGE ALARMS  
 LAKE MATHEWS- SEEPAGE ALARMS - INTEREST  
 LAKE MATHEWS- SPRAY PAINT BOOTH  
 LAKE MATHEWS WATERSHED, DRAINAGE  
 LAKE MATHEWS, HAZEL ROAD  
 LAKE MATHEWS, REPLACE CHLORINATION EQUIPMENT  
 LAKE MATHEWS,DIKE #1- INSTALL PIEZOMETERS, STAS.55+00 & 85+50  
 LAKE MATHEWS: VALVES AND FITTINGS IN HEADWORKS  
 LAKE MATHEWS-CONST. CONCR.TRAFFIC BARR. WALL TO PROTECT HQ FACIL.  
 LAKE MATTHEWS FIRE WATER LINE  
 LAKE PERRIS POLLUTION PREVENTION AND SOURCE WATER PROTECTION (CAPITAL PORTION)  
 LAKE SKINNER - AERATION SYSTEM  
 LAKE SKINNER - CHLORINATION SYSTEM OULET TOWER BYPASS PPLN  
 LAKE SKINNER - CHLORINATION SYSTEM OULET TOWER BYPASS PPLN - INTEREST  
 LAKE SKINNER - INSTALL OULET 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 OULET CONDUIT REPAIR  
 LAKE SKINNER- PROPANE STORAGE TANK  
 LAKE SKINNER- PROPANE STORAGE TANK - INTEREST  
 LIVE OAK RESERVOIR & RESERVOIR BYPASS SCHEDULE 264A  
 LIVE OAK RESERVOIR SURFACE REPAIR  
 MAINTENANCE FACILITIES, 75KVA TRANSFORMER SERVICE-LAKE MATHEWS (ORG CONST)  
 MINOR CAPITAL PROJECTS FOR FY 1989/90 - LAKE MATHEWS  
 MINOR CAPITAL PROJECTS FOR FY 1989/90 - PALOS VERDES RESERVOIR  
 MINOR CAPITAL PROJECTS-LAKE SKINNER, INLET CANAL ELECTRIC FISH BARRIER  
 MINOR CAPITAL PROJECTS-LIVE OAK RESERVOIR, DESILT BASIN IMPROVEMENTS  
 MODIFICATION OF THE LAKE MATHEWS SERVICE WATER SYSTEM  
 MORRIS DAM COTTAGE  
 MORRIS DAM- ENLARGMT. OF SPILLWAY FACLT.& UPPER FDR.VALVE MODF  
 MORRIS DAM ROAD IMPROVEMENT  
 MORRIS DAM, SEISMIC STABILITY REANALYSIS  
 MORRIS DAM-REPLACE EMERGENGY POWER SYSTEM  
 MORRIS RESERVOIR- CAPITAL OBLIGATION PAID  
 MORRIS RESERVOIR- INTEREST OBLIGATION PAID  
 O.C.RESERVOIR - IMPROVE DOMESTIC SYSTEM  
 ORANGE COUNTY RESERVOIR -- JUNCTION STRUCTURE,REPLACE VALVE # 1  
 ORANGE COUNTY RESERVOIR (SPEC NO. 341)  
 ORANGE COUNTY RESERVOIR CHLORINATION STATION  
 ORANGE COUNTY RESERVOIR- EMBANKMENT AND SPILLWAY  
 ORANGE COUNTY RESERVOIR- EMERGENCY GENERATOR  
 ORANGE COUNTY RESERVOIR- FLOATING COVER  
 ORANGE COUNTY RESERVOIR- HOUSE  
 ORANGE COUNTY RESERVOIR- MODIFY DOMESTIC WATER SYSTEM  
 ORANGE COUNTY RESERVOIR- REPLACE RESIDENCE NO. 95D  
 ORANGE COUNTY RESERVOIR-MODIFY ELEC. CONTROL CENTER  
 ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION EQUIPMENT  
 ORANGE COUNTY RESERVOIR-REPLACE CHLORINATION SYSTEM  
 P V RESERVOIR-REPLACE CHLORINATION SYSTEM  
 PALOS VERDES CHLORINATION STATION AND COTTAGE  
 PALOS VERDES RESERVOIR  
 PALOS VERDES RESERVOIR - INLET/OUTLET TOWER  
 PALOS VERDES RESERVOIR- BY PASS PIPELINES  
 PALOS VERDES RESERVOIR- FENCING AROUND  
 PALOS VERDES RESERVOIR- REPLACE DOMESTIC WATER SYSTEM PIPING  
 PALOS VERDES RESERVOIR,BYPASS PIPELINE RELIEF STRUCTURE MODIFN.  
 PALOS VERDES RESERVOIR,COVERING  
 PALOS VERDES RESERVOIR,REPLACE ACCESS AND PERIMETER ROADS  
 PALOS VERDES RESERVOIR: INCREASING ELEVATION OF SPILLWAY CREST  
 PALOS VERDES RESERVOIR-INSTALL VALVE & CHLORINATION NOZZLE,INL.TWR  
 PALOS VERDES RESERVOIR-REPLACE CHLORINATION SYSTEM  
 PAMO RESERVOIR- WATER STORAGE FEASIBILITY STUDY

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

**Description**

**Storage Facilities**

PAMO RESERVOIR- WATER STORAGE FEASIBILITY STUDY- INTEREST  
 RECORD DRAWING RESTORATION PROGRAM, CRA  
 REPAIRS TO AZUSA CONDUIT  
 REPLACE 32  
 REPLACEMENT OF A 30 INCH GATE VALVE P.V.R.  
 RESIDENCE # 95-D, ORANGE COUNTY RESERVOIR  
 RESIDENCE 45-D - CORONA DEL MAR RESERVOIR  
 RESIDENCE 80-D - ORANGE COUNTY RESERVOIR  
 RESIDENCE 90-D - LAKE MATHEW  
 RESIDENCE 91-D - SAN JACINTO RESERVOIR  
 RESIDENCE 93-D - SAN JACINTO RESERVOIR  
 ROADS AT LAKE MATHEWS ABOVE FLOODLINE  
 SAN DIEGO ACQUEDUCT: COTTAGE AT SAN JACINTO RESERVOIR  
 SAN JACINTO RESERVOIR - SAN DIEGO AQUEDUCT  
 SECOND OUTLET, PALOS VERDES RESERVOIR (SPEC NO. 597)  
 SEEPAGE CONTROL AT LAKE MATHEWS  
 TEMPORARY EMPLOYEE LABOR SETTLEMENT  
 VALVE - GENE RESERVOIR (REPLACED 201)  
 VALVE STRUCTURE MODIFICATIONS-UPPER FDR, SAN GABRIEL CROSSING (INTERIM CONST)  
 VALVE, TWO 36  
 WADSWORTH PUMP PLANT CONDUIT PROTECTION  
 WADSWORTH PUMP PLANT, PUMP MOTOR CONVERSION  
 WATER QUALITY PROJECT UPSTREAM  
 WATER SUPPLY SYSTEM, OPERATING TOWER, LAKE MATHEWS

***Sub-total Storage facilities benefits***

**104,831,896**

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

**Description**

**Conveyance and Aqueduct Facilities**

ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT  
 ALL PUMPING PLANTS - 230 KV & 69 KV DISCONNECTS REPLACEMENT  
 ALL PUMPING PLANTS - BRIDGE CRANES  
 ALL PUMPING PLANTS - TRANSFORMER BANK BRIDGE  
 ALLEN MCCOLLOCH PIPELINE - CORROSION INTERFERENCE MITIGATION  
 ALLEN MCCOLLOCH PIPELINE - RIGHT OF WAY  
 ALLEN MCCOLLOCH PIPELINE - UPDATE / MODIFY ALL BOYLE ENGINEERING DRAWINGS  
 AMP VALVE & SERVICE CONNECTION VAULT REPAIR  
 AQUEDUCT & PUMPING PLANT ISOLATION / ACCESS FIXTURES - STUDY  
 AQUEDUCT & PUMPING PLANT ISOLATION GATES  
 ARROWHEAD EAST TUNNEL CONSTRUCTION  
 ARROWHEAD TDS REDUCTION  
 ARROWHEAD TUNNELS CLAIMS COST  
 ARROWHEAD TUNNELS CONNECTOR ROAD  
 ARROWHEAD TUNNELS CONSTRUCTION  
 ARROWHEAD TUNNELS ENGINEERING  
 ARROWHEAD TUNNELS RE-DESIGN  
 ARROWHEAD WEST TUNNEL CONSTRUCTION  
 AULD VALLEY CONTROL STRUCTURE AREA FACILITIES UPGRADE STUDY  
 AUXILIARY POWER SYSTEM REHABILITATION / UPGRADES STUDY  
 BACHELOR MOUNTAIN COMMUNICATION SITE ACQUISITION  
 BACHELOR MOUNTAIN TELECOM SITE IMPROVEMENTS  
 BANK TRANSFORMERS REPLACEMENT STUDY  
 BLACK METAL MOUNTAIN - COMMUNICATIONS FACILITY UPGRADE  
 BOX SPRINGS FEEDER REHAB PHASE III  
 BUDGET ADJUSTMENT  
 CABAZON RADIAL GATE FACILITY IMPROVEMENTS  
 CAJALCO CREEK MITIGATION FLOWS  
 CAST-IRON BLOW OFF REPLACEMENT - PHASE 4  
 CATHODIC PROTECTION STUDY - DESIGN AND CONSTRUCTION  
 CCRP - BLOW-OFF VALVES PHASE 4 PROJECT  
 CCRP - CONTINGENCY  
 CCRP - EMERGENCY REPAIR  
 CCRP - HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB.  
 CCRP - PART 1 & 2  
 CCRP - SAND TRAP CLEANING EQUIPMENT & TRAVELING CRANE STUDY  
 CCRP - TRANSITION & MAN-WAY ACCESS COVER REPLACEMENT - STUDY & DESIGN  
 CCRP - TUNNELS STUDY  
 CEPSRP - 230 KV SYSTEM SYNCHRONIZERS  
 CEPSRP - ALL PUMPING PLANTS - CONTINGENCY & OTHER CREDITS  
 CEPSRP - ALL PUMPING PLANTS - REPLACE 6.9 KV TRANSFORMER BUSHINGS  
 CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV , 69 KV & 6.9 KV LIGHTENING ARRESTERS  
 CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV TRANSFORMER PROTECTION  
 CEPSRP - SWITCHYARDS & HEAD GATES REHABILITATION  
 CEPSRP- ALL PUMPING PLANTS - IRON MOUNTAIN - 230KV BREAKER SWITCH. INST.  
 COLORADO RIVER AQUEDUCT - PUMPING  
 COLORADO RIVER AQUEDUCT - SIPHONS AND RESERVOIR OUTLETS REFURBISHMENT  
 COLORADO RIVER AQUEDUCT CONVEYANCE RELIABILITY, PHASE II REPAIRS AND INSTRUMENTATION  
 CONTROL SYSTEM DRAWING UPGRADE STUDY (PHASE 1) - STUDY  
 COPPER BASIN AND GENE DAM OUTLET WORKS REHABILITATION (STUDY & DESIGN)  
 COPPER BASIN INTERIM CHLORINATION SYSTEM  
 COPPER BASIN OUTLET GATES RELIABILITY  
 COPPER BASIN OUTLET REHABILITATION  
 COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH DAM SLUICWAYS REHABILITATION  
 COPPER BASIN POWER & PHONE LINES REPLACEMENT  
 COPPER SULFATE STORAGE AT LAKE SKINNER AND LAKE MATHEWS  
 CORROSION CONTROL OZONE MATERIAL TEST FACILITY  
 COST OF LAND AND RIGHT OF WAY  
 CRA - ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT  
 CRA - AQUEDUCT AND PUMPING PLANT ISOLATION GATES  
 CRA - AQUEDUCT RESERVOIR AND DISCHARGE LINE ISOLATION GATES  
 CRA - AUXILIARY POWER SYSTEM REHAB  
 CRA - BANK TRANSFORMERS REPLACEMENT STUDY  
 CRA - BLOW-OFF VALVES PHASE 4  
 CRA - CIRCULATING WATER SYSTEM STRAINER REPLACEMENT  
 CRA - CONTROL SYSTEM IMPLEMENTATION PHASE CLOSE OUT  
 CRA - CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2  
 CRA - COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH SLUICWAYS REHABILITATION  
 CRA - COPPER BASIN POWER & PHONE LINES REPLACEMENT  
 CRA - CUT & COVER FORNAT WASH EXPOSURE STUDY  
 CRA - CUT AND COVER FORNAT WASH EXPOSURE STUDY  
 CRA - DANBYTOWER FOOTER REPLACEMENT  
 CRA - DELIVERY LINE NO. 1 SUPPORTS REHAB - FIVE PUMPING PLANTS  
 CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - GENE & INTAKE  
 CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - IRON, EAGLE, & HINDS  
 CRA - DESERT PUMP PLANT OIL CONTAINMENT  
 CRA - DESERT SEWER SYSTEM REHABILITATION  
 CRA - DESERT SEWER SYSTEM REHABILITATION PROJECT  
 CRA - DESERT WATER TANK ACCESS & SAFETY IMPROVEMENTS  
 CRA - DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION  
 CRA - DISCHARGE LINE ISOLATION GATES  
 CRA - DWCV-4 VALVE REPLACEMENT  
 CRA - EAGLE MOUNTAIN SAND TRAPS INFLOW STUDY  
 CRA - ELECTRICAL/ POWER SYST REL. PROG. - IRON MTN - 230KV BREAKER SWITC. INST.  
 CRA - GENE PUMPING PLANT MAIN TRANSFORMER AREA  
 CRA - HINDS PUMP UNIT NO. 8 REFURBISHMENT  
 CRA - INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU  
 CRA - INTAKE PUMPING PLANT AUTOMATION PROGRAMMING  
 CRA - INVESTIGATION OF SIPHONS AND RESERVOIR OUTLETS  
 CRA - IRON MTN. TUNNEL REHABILITATION  
 CRA - LAKEVIEW SIPHON FIRST BARREL - REPAIR DETERIORATED JOINTS  
 CRA - MAIN PUMP MOTOR EXCITERS  
 CRA - MAIN PUMP STUDY  
 CRA - MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY  
 CRA - PUMPING PLANT RELIABILITY PROGRAM CONTINGENCY

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

**Description**

**Conveyance and Aqueduct Facilities**

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 230KV & 69KV PROTECTION PANEL UPGRADE  
 CRA 6.9 KV LEAD JACKETED CABLES  
 CRA 69KV PANEL UPGRADE  
 CRA ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT  
 CRA ALL PUMPING PLANTS - FLOW METER UPGRADES  
 CRA AQUEDUCT BLOCKER GATE REPLACEMENT  
 CRA AQUEDUCT ISOLATION GATES REPLACEMENT  
 CRA BLACK METAL COMMUNICATION SITE II UPGRADE  
 CRA CANAL CRACK REHAB AND EVALUATION  
 CRA CANAL CRACK REHABILITATION  
 CRA CANAL IMPROVEMENTS  
 CRA CIRCULATING WATER SYSTEM STRAINER REPLACEMENT  
 CRA CONDUIT FORMAT WASH EROSION REPAIRS  
 CRA CONVEYANCE RELIABILITY PROGRAM (CCRP) - BLOW-OFF REPAIR  
 CRA CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2  
 CRA COPPER BASIN AND GENE WASH DAM SLUICWAYS  
 CRA COPPER BASIN OUTLET GATES RELIABILITY STUDY  
 CRA DESERT AIRFIELDS IMPROVEMENT  
 CRA DISCHARGE CONTAINMENT PROGRAM - CONTINGENCY  
 CRA DISCHARGE CONTAINMENT PROGRAM - GENE & IRON DRAIN SYSTEMS  
 CRA DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION  
 CRA DISCHARGE CONTAINMENT PROGRAM - OIL & CHEMICAL UNLOADING PAD CONTAINMENT  
 CRA ELECTRICAL / POWER SYSTEM RELIABILITY PROGRAM (CEPSRP)  
 CRA ENERGY EFFICIENCY IMPROVEMENTS  
 CRA GENE PUMPING PLANT HEAVY EQUIPMENT SERVICE PIT  
 CRA GENE STORAGE WAREHOUSE REPLACEMENT  
 CRA HINDS PUMPING PLANT - WASH AREA UPGRADE  
 CRA INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT  
 CRA IRON GARAGE HEAVY EQUIPMENT SERVICE PIT REPLACEMENT  
 CRA IRON HOUSING REPLACEMENT  
 CRA IRON MOUNTAIN SUCTION JOINT REFURBISHMENT PILOT  
 CRA MAIN PUMP & MOTOR REFURISHMENT  
 CRA MAIN PUMP CONTROLS & INSTRUMENTATION  
 CRA MAIN PUMP DISCHARGE VALVE REFURBISHMENT  
 CRA MAIN PUMP MOTOR EXCITERS ASSESSMENT  
 CRA MAIN PUMP MOTOR EXCITERS REHABILITATION  
 CRA MAIN PUMP STUDY  
 CRA MAIN PUMP SUCTION AND DISCHARGE LINES, EXPANSION JOINT REPAIRS  
 CRA MAIN PUMPING PLANT DISCHARGE LINE ISOLATION BULKHEAD COUPLING CONSTRUCTION  
 CRA MAIN PUMPING PLANT UNIT COOLERS & HEAT ESCHANGERS  
 CRA MAIN PUMPING PLANTS LUBRICATION SYSTEM  
 CRA MAIN PUMPING PLANTS SERVICE WATER & SAND REMOVAL SYSTEM  
 CRA MAIN TRANSFORMER REPLACEMENT/REHAB.  
 CRA MILE 12 POWER LINE & FLOW MONITORING EQUIP. STUDY  
 CRA PROTECTIVE SLABS  
 CRA PUMP PLANT FLOW METER UPGRADE  
 CRA PUMP PLANT SUMP PIPING REPLACEMENT STUDY  
 CRA PUMP PLANT UNINTERRUPTABLE POWER STUDY (UPS) UPGRADE  
 CRA PUMP PLANTS 2300KV & 480 V SWITCHRACK REHAB  
 CRA PUMP WELLS CONVERSION AND BLOW-OFF REPAIR  
 CRA PUMPING PLANT REHABILITATION STUDY  
 CRA PUMPING PLANT RELIABILITY PROGRAM - HIGH PRESSURE COMPRESSOR REPLACEMENT  
 CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY  
 CRA PUMPING PLANT SUMP SYSTEM REHABILITATION  
 CRA PUMPING PLANT WASTEWATER SYSTEM - GENE & IRON MTN.  
 CRA PUMPING PLANT WASTEWATER SYSTEM - INTAKE  
 CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT - HINDS & EAGLE MTN.  
 CRA PUMPING PLANTS - AUXILIARY POWER SYSTEM REHABILITATE/UPGRADES  
 CRA PUMPING PLANTS 230KV & 69K DISCONNECT SWITCH REPLACEMENT  
 CRA PUMPING PLANTS ASPHALT REPLACEMENT  
 CRA PUMPING PLANTS CRANE IMPROVEMENTS  
 CRA PUMPING PLANTS SWITCH HOUSE FAULT CURRENT PROTECTION  
 CRA PUMPING PLANTS VULNERABILITY ASSESSMENT  
 CRA PUMPING PLANTS WATER TREATMENT SYSTEMS REPLACEMENT  
 CRA PUMPING PLT RELIABILITY PROGRAM, DISCHARGE LINE COUPLING INSTALLATION  
 CRA PUMPING WELL CONVERSION  
 CRA QUAGGA MUSSEL BARRIERS  
 CRA RADIAL GATES AND SLIDE GATE REHABILITATION  
 CRA RADIAL GATES REPLACEMENT  
 CRA RELIABILITY PHASE II - PUMPING PLANTS 230KV & 69KV DISCONNECT SWITCH REPLACEMENT  
 CRA RELIABILITY PROGRAM - DISCHARGE VALVE LUBRICATORS  
 CRA RELIABILITY PROGRAM - MOTOR BREAKER FAULTY CURRENT STUDY (5 PLANTS)  
 CRA RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568  
 CRA RELIABILITY PHASE II - PUMPING PLANT SWITCH HOUSE FAULT CURRENT PROTECTION  
 CRA SAND TRAP EQUIPMENT UPGRADES

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

**Description**

**Conveyance and Aqueduct Facilities**

CRA SEISMIC EVALUATION - SWITCH HOUSE AND PUMP ANCHORAGE  
 CRA SEISMIC UPGRADE OF 6.9KV SWITCH HOUSES  
 CRA SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION  
 CRA SERVICE CONNECTION DWCV-4 VALVES REPLACEMENT  
 CRA SIPHON REHAB  
 CRA SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS  
 CRA SWITCHRACKS & ANCILLARY STRUCTURES EROSION CONTROL  
 CRA TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT  
 CRA TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT  
 CRA VILLAGES DOMESTIC WATER MAIN DISTRIBUTION REPLACEMENT STUDY  
 CUF DECHLORINATION SYSTEM  
 DAM 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 EQUIPMENT WASH AREA UPGRADES  
 HINDS PUMPING PLANT SCADA SYSTEM  
 HINDS PUMPING PLANT STANDBY GENERATOR REPLACEMENT  
 INLAND FDR, ARROWHEAD TUNNELS REDESIGN  
 INLAND FDR, ARROWHEAD WEST TUNNEL CONSTRUCTION  
 INLAND FDR, CONTRACT 9, CONSTRUCTION OF RIVERSIDE PPLN SOUTH  
 INLAND FDR, OWNER CONTROLLED INSURANCE PROGRAM  
 INLAND FDR, REACH 4, RUSD PPLN  
 INLAND FDR-CNTR #1/DEVIL CYN-WATERMAN RD  
 INLAND FDR-CNTR #4-SOFT GRND TNL/SANTA ANA  
 INLAND FDR-CONT #8-PIPEL PARALLEL TO DAVIS RD  
 INLAND FDR-ENVIRON. MITIG.  
 INLAND FEEDER - RIGHT OF WAY AND EASEMENT PROCUREMENT  
 INLAND FEEDER CONTINGENCY  
 INLAND FEEDER COST OF LAND AND RIGHT OF WAY  
 INLAND FEEDER ENVIRONMENTAL MITIGATION  
 INLAND FEEDER GROUNDWATER MONITORING  
 INLAND FEEDER HIGHLAND PIPELINE CLAIMS COST  
 INLAND FEEDER HIGHLAND PIPELINE CONSTRUCTION  
 INLAND FEEDER HIGHLAND PIPELINE DESIGN  
 INLAND FEEDER MENTONE PIPELINE CONSTRUCTION  
 INLAND FEEDER MENTONE PIPELINE DESIGN  
 INLAND FEEDER MENTONE PIPELINE RUSD CONSTRUCTION  
 INLAND FEEDER OWNER CONTROLLED INSURANCE PROGRAM  
 INLAND FEEDER PROGRAM REMAINING BUDGET/CONTINGENCY  
 INLAND FEEDER PROJECT MANAGEMENT SUPPORT  
 INLAND FEEDER PURCHASE OF LAND AND RIGHT OF WAY  
 INLAND FEEDER RAISE BURIED STRUCTURES AND REALIGN DAVIS RD.  
 INLAND FEEDER REVERSE OSMOSIS PLANT  
 INLAND FEEDER RIVERSIDE BADLANDS TUNNEL CONSTRUCTION  
 INLAND FEEDER RIVERSIDE NORTH PIPELINE DESIGN  
 INLAND FEEDER RUSD CLAIMS DEFENSE  
 INLAND FEEDER STUDIES  
 INLAND FEEDER UNDERGROUND STORAGE TANK REMOVAL & ABOVEGROUND STORAGE TANK INSTALLATION  
 INLAND FEEDER, ARROWHEAD EAST TUNNEL  
 INLAND FEEDER, ARROWHEAD TUNNELS CONSTRUCTION  
 INLAND FEEDER, CONTRACT #5, OPAL AVENUE PORTAL / BADLANDS TUNNEL

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

**Description**

**Conveyance and Aqueduct Facilities**

INLAND FEEDER, CONTRACT #7, RIVERSIDE NORTH PIPELINE CONSTRUCTION  
 INLAND FEEDER, PROGRAM MANAGEMENT  
 INLAND FEEDER/SBMWD HIGHLAND INTERTIE BYPASS LINE REHAB  
 INSULATION JOINT TEST STATIONS  
 INTAKE POWER AND COMMUNICATIONS LINE RELOCATION  
 INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT  
 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 1 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  
 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 FERNADO TUNNEL STATION 778+80 VALVE REPLACEMENT  
 SAN GABRIEL TOWER SEISMIC ASSESSMENT  
 SAN GABRIEL TOWER SLIDE GATE REHABILITATION  
 SAN JACINTO TUNNEL EAST ADIT REHABILITATION  
 SAN JACINTO TUNNEL, WEST PORTAL  
 SAN JOAQUIN RESERVOIR - NEW DESIGN  
 SAN JOAQUIN RESERVOIR IMPROVEMENT- FLOATING COVER  
 SAN JOAQUIN RESERVOIR IMPROVEMENTS  
 SAN JOAQUIN RESERVOIR IMPROVEMENTS STUDY  
 SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE STUDY  
 SANTA ANA RIVER BRIGDE SEISMIC RETROFIT  
 SANTIAGO TOWER ACCESS ROAD UPGRADE  
 SANTIAGO TOWER PATROL ROAD REPAIR  
 SD5 REPAIR  
 SECOND LOWER FEEDER CARBON FIBER REPAIRS  
 SECOND LOWER FEEDER STRAY CURRENT MITIGATION SYSTEMS REFURBISHMENT  
 SECURITY FENCING AT OC-88 PUMPING PLANT  
 SEISMIC EVALUATION OF CRA STRUCTURES  
 SEISMIC PROGRAM  
 SEISMIC UPGRADE OF 11 FACILITIES OF THE CONVEYANCE & DISTRIBUTION SYSTEM  
 SEPULVEDA FEEDER CORROSION INTERFERENCE MITIGATION  
 SEPULVEDA FEEDER REPAIR AT STATION 1099  
 SEPULVEDA FEEDER STRAY CURRENT MITIGATION SYSTEM REFURBISHMENT  
 SERVICE CONNECTION & EOC #2 METER ACCESS ROAD UPGRADE & BETTERMENT  
 SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION

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

**Description**

**Conveyance and Aqueduct Facilities**

SKINNER BR - IMPROVE CABAZON RADIAL GATE FACILITY  
 SKINNER FILTRATION PLANT HELIPAD UPGRADE  
 SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY  
 SWITCHYARDS AND HEAD GATES REHAB  
 TEMESCAL HYDRO-ELECTRIC PLANT ACCESS ROAD UPGRADE  
 TEMESCAL POWER PLANT ACCESS ROAD PAVING  
 TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT  
 TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT PROJECT  
 U.S. BUREAU OF LAND MANAGEMENT LAND ACQUISITION  
 UPPER FEEDER CATHODIC PROTECTION SYSTEM  
 UPPER FEEDER GATES REHABILITATION PROJECTS  
 UPPER FEEDER LEAKING EXPANSION JOINT REPAIR  
 UPPER FEEDER SCHEDULES 2S  
 VALLEY BRANCH - PIPELINE CORROSION TEST STATION  
 WEST VALLEY FEEDER #2 CATHODIC PROTECTION SYSTEM REHABILITATION  
 WEYMOUTH WATER TREATMENT PLANT - NORTH PERIMETER WALL  
 WHITE WATER SIPHON PROTECTION  
 WHITEWATER SIPHON PROTECTION STRUCTURE  
 WHITEWATER SIPHONS EROSION PROTECTION

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

**\$ 82,784,726**

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

**Description**

**Distribution Facilities**

104568 - SITE 3 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN  
 42" CONICAL PLUG VALVE REPLACEMENT  
 ACCUSONIC FLOW METER UPGRADE  
 ACCUSTIC FIBER OPTIC MONITORING OF PCCP LINES  
 ALAMEDA CORRIDOR PIPELINE  
 ALL FACILITIES - WATER DISCHARGE ELIMINATION  
 ALL FACILITIES INSPECTION AND REPLACEMENT OF CRITICAL VACUUM VALVES  
 ALL FACILITIES, INSPECTION AND REPLACEMENT OF CRITICAL VACUUM VALVES  
 ALL FEEDERS - MANHOLE LOCKING DEVICE RETROFIT  
 ALL PUMPING PLANTS - INSTALL HYPOCHLORINATION STATIONS  
 ALLEN MCCOLLOCH PIPELINE 2010 REFURBISHMENT  
 ALLEN MCCOLLOCH PIPELINE CATHODIC PROTECTION  
 ALLEN MCCOLLOCH PIPELINE INTERCONNECTIONS  
 ALLEN MCCOLLOCH PIPELINE LOCAL CONTROL MODIFICATIONS  
 ALLEN MCCOLLOCH PIPELINE REPAIR  
 ALLEN MCCOLLOCH PIPELINE REPAIR - CARBON FIBER LINING REPAIR  
 ALLEN MCCOLLOCH PIPELINE REPAIR - SERVICE CONNECTIONS UPGRADES  
 ALLEN MCCOLLOCH PIPELINE REPAIR - STATION 276+63  
 ALLEN MCCOLLOCH PIPELINE REPAIR - SURGE SUPPRESSION SYSTEM AT OC88A  
 ALLEN MCCOLLOCH PIPELINE REPAIR - VALVE ACTUATOR REPLACEMENTS  
 ALLEN MCCOLLOCH PIPELINE REPAIR SERVICE CONNECTIONS SIMPLIFICATION  
 ALLEN MCCOLLOCH PIPELINE STRUCTURE - ROOF SLAB REPAIRS  
 ALLEN MCCOLLOCH PIPELINE VALVE VAULT REPAIRS  
 ALLEN-MCCOLLOCH CORROSION/INTERFERENCE MITIGATION, STATION 719+34 TO 1178+02  
 ALLEN-MCCOLLOCH PIPELINE  
 ALLEN-MCCOLLOCH PIPELINE PCCP REHABILITATION  
 ALLEN-MCCOLLOCH PIPELINE REFURBISHMENT - STAGE 2  
 ALLEN-MCCOLLOCH PIPELINE VALVE AND SERVICE CONNECTION VAULT REPAIRS  
 AMP -SERVICE CONNECTIONS UPGRADES  
 AMP -VALVE ACTUATOR REPLACEMENTS  
 AMP COMPLETION RESOLUTION RIGHT OF WAY ISSUES  
 AMR - RTU UPGRADE - PHASE 2  
 ANODE WELL REPLACEMENT FOR ORANGE COUNTY AND RIALTO FEEDERS  
 ARROW HIGHWAY PROPERTY DEVELOPMENT  
 ASPHALT REPAIRS TO PERIMETER OF SEPULVEDA PCS  
 ASSESS THE CONDITION OF METROPOLITAN'S PRESTRESSED CONCRETE CYLINDER PIPE  
 ASSESS THE CONDITIONS OF MET'S  
 ASSESSMENT OF PRESTRESSED CONCRETE CYLINDER PIPELINES - PHASE 3  
 AULD VALLEY CONTROL STRUCTURE AREA FACILITIES  
 AUTOMATED RESERVOIR WATER QUALITY MONITORING  
 AUTOMATIC METER READING SYSTEM - RTU UPGRADE PHASE 2  
 AUTOMATIC METER READING SYSTEM UPGRADE  
 AUTOMATION COMMUNICATION UPGRADE  
 AUTOMATION DOCUMENTATION SURVEY F/A  
 BAR 97- ENHANCED AREA VEHICLE TESTING  
 BATTERY MONITORING SYSTEM FOR AUTOMATIC METER READING SYSTEM  
 BIXBY VALVE REPLACEMENT  
 BLACK METAL MOUNTAIN ELECTRICAL TRANSFORMER  
 BOX SPRINGS FEEDER BROKEN BACK REPAIR  
 BOX SPRINGS FEEDER BROKEN BACK REPAIR PHASE I  
 BOX SPRINGS FEEDER PHASE 3 AND 4 ENVIRONMENTAL MONITORING  
 BOX SPRINGS FEEDER REPAIR - PHASE II  
 BOX SPRINGS FEEDER REPAIRS PHASE 3 AND PHASE 4  
 BUDGET ADJUSTMENT  
 C&D CRANE INSTALLATION AT OC-88 PUMPING PLANT  
 CAJALCO CREEK DAM MANHOLE COVER RETROFIT  
 CAJALCO CREEK DETENTION DAM SPILLWAY ACCESS ROAD  
 CALABASAS FEEDER CARBON FIBER /BROKEN BACK REPAIR  
 CALABASAS FEEDER INTERFERENCE MITIGATION  
 CALABASAS FEEDER PCCP REHABILITATION  
 CALABASAS FEEDER REPAIR, STUDY  
 CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN \$250,000 FOR FY 2010/11  
 CAPITAL PROJECTS COSTING LESS THAN \$250,000 FOR FY2008-09  
 CASA LOMA AND SAN DIEGO CANAL LINING STUDY - PART 2  
 CASA LOMA SIPHON BARREL 1 & 2 DVL AND SD CANAL FLOW METER REPLACEMENT  
 CATHODIC PROTECTION FOR THE FOOTHILL FEEDER  
 CATHODIC PROTECTION SYSTEM UPGRADES  
 CCP-PHASE 2 CONSTRUCTION  
 CDSRP - DISCHARGE ELIMINATION  
 CDSRP - ENTRAINED AIR IN UPPER FEEDER PIPELINE STUDY  
 CDSRP - SEPULVEDA FEEDER REPAIRS  
 CDSRP - SEPULVEDA TANKS RECOATING  
 CENTRAL POOL AUGMENTATION - TUNNEL AND PIPELINE & RIGHT-OF-WAY ACQUISITION  
 CENTRAL POOL AUGMENTATION (CPA) PROGRAM - PIPELINE AND TUNNEL ALIGNMENT  
 CENTRAL POOL AUGMENTATION AND WATER QUALITY PROJECT (CPAWQP)  
 CHEMICAL INVENTORY AND USAGE REWRITE AND ELECTRICAL SYSTEM LOG  
 CHEMICAL UNLOADING FACILITY RETROFIT  
 CHEVALIER FALCON MILLING MACHINE  
 COASTAL JUNCTION REVERSE FLOW BYPASS  
 COASTAL PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT  
 COLLIS VALVE REPLACEMENT  
 COMMUNICATIONS STRUCTURE ALARM MONITORING  
 COMPREHENSIVE INFORMATION SECURITY ASSESSMENT PHASE III  
 CONSTRUCTION PHASE 2  
 CONTRACT & LITIGATION TASKS -CONTRACT # 1396  
 CONTROL SYSTEM DATA STORAGE AND REPORTING  
 CONTROL SYSTEM DRAWING & DOCUMENTATION UPDATE  
 CONTROL SYSTEM ENHANCEMENT PROGRAM (CSEP) - DIGITAL SUBNET STANDARDIZATION  
 CONTROL SYSTEMS AUTOMATION COMMUNICATION UPGRADE  
 CONTROLS COMMUNICATIONS FRAME RELAY CONVERSION - APPROPRIATED  
 CONVERSION OF DEFORMATION SURVEY MONITORING AT GENE WASH, COPPER BASIN, AND DIEMER BASIN 8  
 CONVEYANCE AND DISTRIBUTION SYSTEM REHABILITATION PROGRAM (CDSRP) - CURRENT DRAIN STATIONS  
 COPPER BASIN ICS  
 COPPER BASIN SEWER SYSTEM  
 CORONA POWER PLANT REPLACE EMERGENCY GENERATOR  
 CORROSION MATERIALS TESTING FACILITY SCADA UPGRADE  
 COVINA PRESSURECONTROL FACILITY

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

**Description**

**Distribution Facilities**

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

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

**Description**

**Distribution Facilities**

ETIWANDA PIPELINE AND CONTROL FACILITY - AS BUILTS  
 ETIWANDA PIPELINE AND CONTROL FACILITY - CATHODIC PROTECTION  
 ETIWANDA PIPELINE AND CONTROL FACILITY - EMERGENCY DISCHARGE CONDUITS  
 ETIWANDA PIPELINE AND CONTROL FACILITY - LANDSCAPING AND IRRIGATION  
 ETIWANDA PIPELINE AND CONTROL FACILITY - RESIDENCES  
 ETIWANDA PIPELINE AND CONTROL FACILITY - RIALTO FEEDER TO UPPER PIPELINE  
 ETIWANDA RESERVOIR - EXTEND OUTLET STRUCTURE  
 FACILITY AND PROCESS RELIABILITY ASSESSMENT  
 FILTER ISOLATION GATE AND BACKWASH CONTROL WEIR COVERS MODULES 1- 6  
 FLOWMETER MODIFICATION - LAKE SKINNER INLET, ETIWANDA EFFLUENT & WADSWORTH CROSS CHANNEL  
 FOOTHILL & SEPULVEDA FEEDER PCCP CARBON FIBER JOINT REPAIRS  
 FOOTHILL FEEDER ADEN AVE. REHABILITATION  
 FOOTHILL FEEDER CARBON FIBER REPAIR  
 FOOTHILL FEEDER CATHODIC PROTECTION  
 FOOTHILL FEEDER PIPELINE REPLACEMENT PROJECT  
 FOOTHILL FEEDER POWER PLANT EXPANSION  
 FOOTHILL FEEDER REPAIR @ SANTA CLARITA RIVER  
 FOOTHILL FEEDER, CARBON FIBER REPAIRS  
 FOOTHILL HYDROELECTRIC RUNNER REPLACEMENT  
 FOOTHILL PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION  
 FOOTHILL PCS FLOOD PUMP INSTALLATION DESIGN DOCUMENTATION  
 FOOTHILL PCS INTERNAL VALVE LINERS UPGRADE  
 FUTURE SYSTEM RELIABILITY PROGRAM  
 GARVEY RESERVOIR - HYPOCHLORITE FEED SYSTEM  
 GARVEY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS  
 GARVEY RESERVOIR - LOWER ACCESS PAVING ROAD & DRAINS  
 GARVEY RESERVOIR HYPOCHLORITE FEED SYSTEM  
 GARVEY RESERVOIR SITE DRAINAGE REPAIRS AND MODIFICATIONS  
 GENE & IRON POOLS  
 GENE AIR CONDITIONING SYSTEM REPLACEMENT  
 GENE MESS HALL AIR CONDITIONING UNIT  
 GENE SPARE PARTS WAREHOUSE IMPROVEMENTS  
 GLENDALE 01 SERVICE CONNECTION REHAB  
 GLENDALE-01 SERVICE CONNECION REHABILITATION AND UPGRADE  
 GREG AVE PCS FACILITY REHABILITATION  
 GREG AVENUE CONTROL STRUCTURE VALVE REPLACEMENT  
 GREG AVENUE PCS CONTROL BUILDING INTERIOR REHABILITATION  
 HINDS GARAGE ASBESTOS SHEETING REPLACEMENT  
 HVAC MODIFICATIONS FOR ELECTRICAL SAFETY AND RELIABILITY  
 HYDRAULIC MODELING PROJECT  
 HYDROELECTRIC PLANT CARBON DIOXIDE (CO2) FIRE SUPPRESSION SYSTEM MODIFICATIONS  
 IAS PROJECTS - CPA  
 IAS PROJECTS - DVL-SKINNER  
 IAS PROJECTS - MILLS SUPPLY RELIABILITY  
 INLAND PCSUST REMOVAL & AST INSTALLATION  
 INSTALL MOTION SENSORS IN NEW EXPANSION  
 INSTALL TEST LEADS AT FOUR LOCATIONS  
 INSULATION JOINT TEST STATIONS  
 INTAKE PUMPING PLANT - UNDER FREQUENCY PROTECTION RELAY UPGRADE  
 IRON MOUNTAIN - TRANSFORMER OIL TANK RELOCATION  
 JENSEN DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT # 1396  
 JENSEN FILTRATION PLANT - REPLACE ADMINISTRATION BUILDING AIR CONDITIONING  
 JENSEN FILTRATION PLANT - ROAD RECONSTRUCTION  
 JENSEN FILTRATION PLANT - SANDBLASTING BOOTH PURCHASE & INSTALLATION  
 JENSEN FILTRATION PLANT - TRAVELING BRIDGE RETROFIT MODULE 2 & 3  
 LA VERNE FACILITIES - BRIDGEPORT E-2-PATH  
 LA VERNE FACILITIES - ENERGY CONSERVATION ECM1 - 10  
 LA VERNE FACILITIES - EXPANSION OF THE SANITARY SEWER  
 LA VERNE FACILITIES - HAZARDOUS WASTE STORAGE  
 LA VERNE FACILITIES - MAIN TRANSFORMERS REPLACEMENT  
 LA VERNE FACILITIES - MATERIALS TESTING LABORATORY  
 LA VERNE FACILITIES - REPLACEMENT OF FLOCCULATOR STUB SHAFT - BASINS 1 & 2  
 LA VERNE MACHINE SHOP - AIR CONDITIONING UNIT REPLACEMENT  
 LA VERNE MACHINE SHOP - REPAIR HORIZONTAL BORING MILL  
 LA-35 DISCHARGE STRUCTURE REPAIRS  
 LAKE MATHEWS - CONSTRUCTION OF BACKUP COMPUTER FACILITIES  
 LAKE MATHEWS - DIVERSION TUNNEL WALKWAY REPAIR  
 LAKE MATHEWS - FACILITY WIDE EMERGENCY WARNING AND PAGING SYSTEM  
 LAKE MATHEWS - FOREBAY MCC ROOF IMPROVEMENT  
 LAKE MATHEWS - MAIN DAM TOE SEEPAGE COLLECTION  
 LAKE MATHEWS - MULTIPLE SPECIES MANAGER'S OFFICE & RESIDENCE  
 LAKE MATHEWS - RENOVATION OF BLDGS. 8 & 15, GENERAL ASSEMBLY & ADMIN. BLDG. OFFICE AREAS  
 LAKE MATHEWS - RETROFIT LOWER ENTRANCE GATE SWING ARM  
 LAKE MATHEWS FOREBAY MCC ROOF IMPROVEMENT  
 LAKE MATHEWS MAIN DAM TOE SEEPAGE COLLECTION  
 LAKE MATHEWS RETROFIT LOWER ENTRANCE GATE SWING ARM  
 LAKE PERRIS BYPASS PIPELINE EXPLORATION  
 LAKE PERRIS EMERGENCY STANDBY GENERATOR AND TRANSFER SWITCH REPLACEMENT  
 LAKE SKINNER - AERATOR AIR COMPRESSOR REPLACEMENT  
 LAKE SKINNER - OUTLET TOWER VALVE REHABILITATION  
 LAKE SKINNER - REPLACEMENT AERATOR RING  
 LAKE SKINNER AERATOR AIR COMPRESSOR REPLACEMENT  
 LAKE SKINNER DAM ROAD REHAB  
 LAKE SKINNER EAST BYPASS SCREENING STRUCTURES  
 LAKE SKINNER OUTLET TOWER CHLORINE SYSTEM MODIFICATION  
 LAKE SKINNER WEST BYPASS SCREENING STRUCTURE  
 LAKE SKINNER WEST BYPASS SCREENING STRUCTURE REHABILITATION  
 LAKE VIEW PIPE LINE REPAIRS  
 LAKEVIEW PIPELINE - REPLACE VACUUM/AIR RELEASE  
 LAKEVIEW PIPELINE CATHODIC PROTECTION SYSTEM  
 LOWER FEEDER - CATHODIC PROTECTION  
 LOWER FEEDER WR 33 - AREA REPAIR AND REMEDIATION  
 MAGAZINE CANYON CANOPY  
 MAGAZINE CANYON-ISOLATION GATE JACKING FRAME  
 MAPES LAND ACQUISITION  
 MICROWAVE COMMUNICATION SITES BUILDING UPGRADE  
 MIDDLE CROSS FEEDER CATHODIC PROTECTION

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

**Description**

**Distribution Facilities**

MIDDLE FEEDER - CATHODIC PROTECTION SYSTEMS  
MIDDLE FEEDER - NORTH CATHODIC PROTECTION SYSTEM  
MIDDLE FEEDER NORTH CATHODIC PROTECTION SYSTEM  
MILLS FILTRATION PLANT - INVESTIGATION TO RELOCATE ACCESS ROAD  
MINOR CAP 08/09 PLACEHOLDER  
MINOR CAP FY 2009/10  
MINOR CAP FY 2012/13  
MINOR CAP FY 2014/16  
MINOR CAPITAL PROJECTS PROGRAM 07/08 - REMAINING FUNDS  
MOUNT OLYMPUS TUNNEL COST RIGHT-OF-WAY (ROW)  
MWD ROAD GUARDRAIL  
NITROGEN STORAGE COMPLIANCE AT DVL, INLAND FEEDER PCS, AND LAKE MATHEWS  
NITROGEN STORAGE STUDY  
NON PCCP LINES CONDITION INSPECTION AND ASSESSMENT  
NORTH PORTAL OF HOLLYWOOD TUNNEL  
NORTH REACH CONSTRUCTION / INSPECTION / CM  
NORTH REACH CONSTRUCTION/ASBUILT  
NORTH REACH ENVIRONMENTAL - CONSTRUCTION  
NORTH REACH FINAL DESIGN & ADV/NTP  
NORTH REACH POST DESIGN / ASBUILT  
NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION  
NORTHERN PIPELINE ENVIRONMENTAL FINAL DESIGN  
NORTHERN PIPELINE RIGHT OF WAY FINAL DESIGN  
OAK ST. PCS ROOF REPLACEMENT  
OAK STREET PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT - CONSTRUCTION  
OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REHAB  
OC FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS  
OC RESERVOIR SODIUM HYPOCHLORITE PUMP AND PIPING REPLACEMENT  
OC-71 FLOW CONTROL FACILITY  
OC-88 - SECURITY FENCING AT PUMP PLANT  
OC-88 EMERGENCY STANDBY GENERATOR UPGRADE STUDY  
OC-88 PUMP PLANT AIR COMPRESSOR UPGRADE  
OC-88 PUMP STATION FLOW METER UPGRADE  
OC-88 PUMPING PLANT SURGE TANKS UPGRADES  
OLINDA PCS AND SANTIAGO TOWER EMERGENCY GENERATORS  
OLINDA PRESSURE CONTROL STRUCTURE  
ON-CALL RESOURCES MANAGEMENT APPLICATION  
OPERATIONS CONTROL CENTER AT EAGLE ROCK  
OPERATIONS CONTROL CENTER UPS REPLACEMENT  
OPERATIONS SCOPING STUDY  
ORANGE CO FDR, BLOW-OFF STRUCTURE AND ACCESS ROAD REPAIR  
ORANGE COUNTY - 88 PUMP PLANT AIR COMPRESSOR UPGRADE  
ORANGE COUNTY - 88 SECURITY FENCING AT PUMP PLANT  
ORANGE COUNTY C & D ELECTRICAL IMPROVEMENTS - STUDY  
ORANGE COUNTY C&D INSTRUMENTATION PANEL IMPROVEMENTS  
ORANGE COUNTY CONVEYANCE AND DISTRIBUTION SERVICE CENTER  
ORANGE COUNTY FEEDER CATHODIC PROTECTION  
ORANGE COUNTY FEEDER EXTENSION LINING REPAIR  
ORANGE COUNTY FEEDER INSPECTION  
ORANGE COUNTY FEEDER INTERNAL INSPECTION STUDY  
ORANGE COUNTY FEEDER LINING REPAIR  
ORANGE COUNTY FEEDER PRESSURE CONTROL STRUCTURES  
ORANGE COUNTY FEEDER RELOCATION IN FULLERTON  
ORANGE COUNTY FEEDER SCHEDULE 37SC CATHODIC PROTECTION  
ORANGE COUNTY FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS  
ORANGE COUNTY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS  
ORANGE COUNTY RESERVOIR - PIEZOMETERS & SEEPAGE MONITORING AUTOMATION  
OXIDATION DEMONSTRATION PLANT CONTROL SYSTEM REPLACEMENT  
PALOS ALTOS FEEDER - 108TH ST.  
PALOS VERDES FEEDER PCS - VALVE REPLACEMENT  
PALOS VERDES RESERVOIR - INSTALL HYPOCHLORINATION STATIONS  
PC-1 EFFLUENT OPEN CHANNEL TRASH RACK  
PC-1 EFFLUENT OPEN CHANNEL TRASH RACK PROJECT  
PCCP HYDRAULIC ANALYSES  
PERIMETER FENCING AT PLACERITA CREEK  
PERMANENT LEAK DETECTION/PIPELINE MONITORING SYSTEM  
PERRIS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION  
PERRIS PCS ROOF REHAB  
PERRIS PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT  
PERRIS PUMPBACK COVER  
PERRIS VALLEY PIPELINE - DESIGN-BUILD (EMWD)  
PERRIS VALLEY PIPELINE - GENERAL  
PERRIS VALLEY PIPELINE - NORTH REACH  
PERRIS VALLEY PIPELINE - RESERVED FOR STAGE II DESIGN / BUILD  
PERRIS VALLEY PIPELINE - SOUTH REACH  
PERRIS VALLEY PIPELINE - STUDY  
PERRIS VALLEY PIPELINE - TIE-IN (WMWD)  
PERRIS VALLEY PIPELINE - VALVES  
PERRIS VALLEY PIPELINE DESIGN-BUILD (EMWD)  
PERRIS VALLEY PIPELINE NORTH REACH  
PERRIS VALLEY PIPELINE SOUTH REACH  
PERRIS VALLEY PIPELINE TIE-IN (WMWD)  
PERRIS VALLEY PIPELINE VALVES  
PLACENTIA RAILROAD LOWERING PROJECT  
PLACERITA CREEK PERIMETER FENCING  
PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING  
PLC REPLACEMENT PHASE II  
PRESTRESSED CONCRETE CYLINDER PIPE - PHASE 2  
PRESTRESSED CONCRETE CYLINDER PIPE -PHASE 3  
PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF ORANGE COUNTY  
PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF SAN BERNARDINO COUNTY  
PROGRAMMABLE LOGIC CONTROLLER (PLC) STANDARDIZATION  
PUDDINGSTONE SPILLWAY CROSS CONNECTION  
PV RESERVOIR HYPOCHLORITE PUMP AND PIPING REPLACEMENT  
R&R FOR DISTRIBUTION  
RED MOUNTAIN - OCT. 2007 FIRE DAMAGE - COMMUNICATION POWER TOWERS & METER STRUCTURES REPAIR/REPLACE (INCIDENT NO. 2007-1023-0271)  
RED MOUNTAIN HEP FLOOD DAMAGE

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

**Description**

**Distribution Facilities**

RED MTN COMM. TOWER & METER STRUCTURE  
 REHABILITATION OF THE GREG AVE PCS CONTROL BUILDING INTERIOR  
 RELOCATION OF ORANGE COUNTY FEEDER  
 RELOCATION OF PORTION OF ORANGE COUNTY FEEDER (MWD'S SHARE)  
 REMAINING PORTIONS  
 REPAIRS TO THE LA-35 DISCHARGE STRUCTURE  
 REPLACE 2 FIRE & DOMESTIC WATER SYSTEM  
 REPLACE COMMUNICATION LINE TO THE SAN GABRIEL CONTROL TOWER  
 REPLACE COPPER GROUNDWIRES ON DESERT HIGH VOLTAGE TRANSMISSION TOWERS  
 REPLACE VALVE POSITION INDICATORS  
 REPLACEMENT OF COMMUNICATION LINE AT SAN GABRIEL TOWER  
 REPLACEMENT/ RELINE AT-RISK PCCP LINES - STAGE 1  
 RIALTO FEEDER BROKEN BACK REPAIR  
 RIALTO FEEDER VALVE STRUCTURE  
 RIALTO FEEDER, REPAIRS AT SELECT LOCATIONS, STUDY  
 RIALTO PIPELINE - CONSTRUCTION PHASE 1  
 RIALTO PIPELINE - CONSTRUCTION PHASE 2  
 RIALTO PIPELINE IMPROVEMENTS  
 RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION  
 RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION PHASE III  
 RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 2  
 RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 3  
 RIALTO PIPELINE IMPROVEMENTS - FINAL DESIGN  
 RIALTO PIPELINE IMPROVEMENTS - VALVE PROCUREMENT  
 RIALTO PIPELINE IMPROVEMENTS PHASE 1 FINAL DESIGN  
 RIALTO PIPELINE PCCP REHABILITATION  
 RIALTO PIPELINE REPAIR @ STA 3196+44  
 RIALTO PIPELINE REPAIR AT THOMPSON CREEK  
 RIALTO PIPELINE REPAIRS AT STATION 3198+44  
 RIALTO PIPELINE VALVE PROCUREMENT  
 ROBERT B. DIEMER FILTRATION PLANT - LAND ACQUISITION  
 ROOF REPLACEMENT AT SOTO ST. FACILITY  
 SAN DIEGO #3 BLOWOFF TO PUMPWELL CONVERSION  
 SAN DIEGO CANAL - EAST & WEST BYPASS SCREENING STRUCTURES STUDY  
 SAN DIEGO CANAL - ELECTRICAL VAULT & CONDUCTOR REPLACEMENT  
 SAN DIEGO CANAL - FENCING  
 SAN DIEGO CANAL - INSTALL ACOUSTIC FLOW METER  
 SAN DIEGO CANAL - PIEZOMETER  
 SAN DIEGO CANAL - REPLACE SODIUM BISULFATE TANK  
 SAN DIEGO CANAL - SEEPAGE STUDY  
 SAN DIEGO CANAL BISULFITE TANK REPLACEMENT  
 SAN DIEGO CANAL LINER REPAIR  
 SAN DIEGO CANAL RADIAL GATE REHAB  
 SAN DIEGO CANAL SEEPAGE STUDY  
 SAN DIEGO CANAL WEST BYPASS TRASH RACK  
 SAN DIEGO PIPELINE #4 VALVE REPLACEMENT  
 SAN DIEGO PIPELINE 1 BLOW-OFF VALVE REPLACEMENT  
 SAN DIEGO PIPELINE 3 & 5 REMOTE CONTROL OF BYPASS  
 SAN DIEGO PIPELINE 4 AND AULD VALLEY PIPELINE CARBON FIBER REPAIRS  
 SAN DIEGO PIPELINE 5 & LAKE SKINNER OUTLET REPAIR  
 SAN DIEGO PIPELINE 6 - PRESSURE CONTROL STRUCTURE/HYDROELECTRIC PLANT - FEASIBILITY STUDY  
 SAN DIEGO PIPELINE 6 NORTH REACH, ENVIRONMENTAL MONITORING DURING CONSTRUCTION  
 SAN DIEGO PIPELINE NO. 3 BYPASS  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - ETIWANDA FACILITY/DROP INLET STRUCTURE  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - PLEASANT PEAK, COMMUNICATIONS  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILT  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL COST OF RIGHT OF WAY (OPTIONAL PORTAL SITE)  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL CONSTRUCTION  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PROGRAM MANAGEMENT  
 SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL RIGHT OF WAY PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.1 SAN DIEGO CANAL TO MOUNT OLYMPUS  
 SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.2 MOUNT OLYMPUS TUNNEL & PORTALS  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH CONSTRUCTION - AS BUILT  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL - CONSTRUCTION  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH FINAL DESIGN & ADV/NTP  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH POST DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY FINAL DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - NORTHERN PIPELINE COST OF RIGHT OF WAY  
 SAN DIEGO PIPELINE NO. 6 - NORTHERN REACH ENVIRONMENTAL FINAL DESIGN  
 SAN DIEGO PIPELINE NO. 6 - OPERATIONS SCOPING STUDY  
 SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - DESIGN  
 SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - ENVIRONMENTAL  
 SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - PROJECT MANAGEMENT  
 SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - RIGHT OF WAY  
 SAN DIEGO PIPELINE NO. 6 - PROJECT MANAGEMENT  
 SAN DIEGO PIPELINE NO. 6 - RIGHT OF WAY  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH - PROGRAM MANAGEMENT  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH / TUNNEL STUDY  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH CONSTRUCTION / AS BUILT  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH COST OF RIGHT OF WAY  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL - CONSTRUCTION  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL FINAL DESIGN  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH FINAL DESIGN/ADV  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY FINAL DESIGN  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY PRELIMINARY DESIGN  
 SAN DIEGO PIPELINE NO. 6 - SOUTH REACH TUNNEL ALIGNMENT ANALYSIS  
 SAN DIEGO PIPELINE NO. 6 AREA STUDY  
 SAN DIEGO PIPELINE NO. 6 ENVIRONMENTAL MITIGATION

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

**Description**

**Distribution Facilities**

SAN DIEGO PIPELINE NO.4 & AULD VALLEY PIPELINE CARBON FIBER REPAIR STUDY  
 SAN DIEGO PIPELINE NOS. 1AND 3 - VALVE REPLACEMENT  
 SAN DIMAS CONTROL STRUCTURE 500 GALLONS DIESEL TANK REPLACEMENT  
 SAN DIMAS HEP BATTERY BANK AND GENERATOR BREAKER  
 SAN DIMAS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION  
 SAN FRANCISQUITO PIPELINE BLOW OFF STRUCTURE, STA 287+70, ACCESS ROAD CONSTRUCTION  
 SAN GABRIEL TOWER SEISMIC UPGRADE  
 SAN GABRIEL TOWER SLIDE GATE REHABILITATION  
 SAN JACINTO #1 AND #2 CASA LOMA FAULT CROSSING STRUCTURE UPGRADE  
 SAN JOAQUIN RELIEF STRUCTURE FOR EASTERN ORANGE COUNTY FEEDER #2  
 SAN JOAQUIN RELIEF STRUCTURE FOR EASTR OC FDR #2  
 SAN JOAQUIN RESERVOIR, INSTALL BULKHEAD  
 SANTA ANA RIVER BRIDGE SEISMIC RETROFIT  
 SANTA ANA RIVER BRIDGE SEISMIC UPGRADE  
 SANTA MONICA FEEDER RELOCATION  
 SANTA MONICA FEEDER STATION 495+10 REHABILITATION  
 SANTIAGO CONTROL TOWER CATHODIC PROTECTION  
 SANTIAGO LATERAL REPLACE MOTOR - OPERATED VALVE  
 SANTIAGO LATERAL SECTIONALIZATION VALVE REPLACEMENT  
 SANTIAGO LATERAL STA 216+40 BUTTERFLY VALVE REPLACEMENT  
 SANTIAGO PRESSURE CONTROL STRUCTURE  
 SANTIAGO TOWER ACCESS ROAD IMPROVEMENT  
 SCADA COMMUNICATIONS MPLS UPGRADE - AT&T REGION (MINOR CAP)  
 SCADA COMMUNICATIONS MPLS UPGRADE - VERIZON REGION (MINOR CAP)  
 SCADA SYSTEM HARDWARE UPGRADE  
 SCADA SYSTEM NT SOFTWARE UPGRADE  
 SCADA SYSTEM SUPPORT PROGRAMS  
 SD AND CASA LOMA CANALS LINING  
 SD CANAL EAST & WEST BYPASS SCREENING STRUCTURES STUDY  
 SD CANAL REPLACE SODIUM BISULFITE TANK  
 SD PIPELINE 3 CULVERT ROAD REHAB  
 SD PIPELINE 3,4, AND 5 PROTECTIVE COVER  
 SD PIPELINE 4 EXPLORATORY EXCAVATION  
 SD PIPELINE 5 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  
 SECOND LOWER FEEDER PCCP REPAIRS  
 SECOND LOWER FEEDER RELIABILITY AT 3 LOCATIONS - SEISMIC STUDY  
 SEISMIC UPGRADE OF 11 FACILITIES ON THE ALLEN MCCOLLOCH PIPELINE  
 SELECTED PRESSURE REPLACE VALVE POSITION INDICATORS  
 SEPULVEDA CANYON CONTROL FACILITY WATER STORAGE TANKS SEISMIC UPGRADE  
 SEPULVEDA CANYON POWER PLANT TAIL RACE COATINGS  
 SEPULVEDA CANYON TANKS EXTERIOR AND INTERIOR RECOATING  
 SEPULVEDA FEEDER - CARBON FIBER LINER REPAIRS  
 SEPULVEDA FEEDER CATHODIC PROTECTION SYSTEM  
 SEPULVEDA FEEDER CORROSION/INTERFERENCE MITIGATION, STATION 950+00 TO 1170+00  
 SEPULVEDA FEEDER HEP AUTO PILOT  
 SEPULVEDA FEEDER REPAIRS AT 3 SITES  
 SEPULVEDA FEEDER SOUTH CATHODIC PROTECTION SYSTEM  
 SEPULVEDA FEEDER STATION 2002+02 TO 2273+28 STRAY CURRENT INTERFERENCE MITIGATION  
 SEPULVEDA FEEDER STRAY CURRENT MITIGATION REFURBISHMENT  
 SEPULVEDA PCS - PERIMETER ASPHALT REPAIRS  
 SEPULVEDA PIPELINE PCCP REHABILITATION  
 SERVICE CONNECTION LV-01 UPGRADES  
 SERVICE CONNECTION OC-26 - RELOCATION OF METER CABINET, INSTRUMENT HOUSING & AIR VENT STACK  
 SIMULATION AND MODELING APPLICATION FOR REAL TIME OPERATIONS SMART OPS  
 SITES 1 & 2 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN & PIPE FABRICATION  
 SKINNER BRANCH - AIR INJECTION MODIFICATIONS TO RED MOUNTAIN POWER PLANT  
 SKINNER BRANCH - CASA LOMA CANAL  
 SKINNER BRANCH - CASA LOMA SIPHON BARREL ONE  
 SKINNER BRANCH - CATWALK FOR TRAVELING MAINTENANCE BRIDGE FOR  
 SKINNER BRANCH - FABRICATE & REPLACE THE STEMS, NUTS & KEYS  
 SKINNER BRANCH - REPAIR MODULE 1 AND 2 FLOCCULATORS BRIDGES  
 SKINNER DAM REMEDIATION  
 SKINNER DISTRIBUTION SYSTEM - CONTRACT # 1396  
 SKINNER ELECTRICAL BUILDING HVAC UPGRADE  
 SKINNER FILTRATION PLANT - ELEVATED SLAB IN SERVICE BLDG 1  
 SKINNER HELIPAD REHAB  
 SKINNER INSULATING FLANGES AT PLANT 1 BUTTERFLY VALVES  
 SKINNER REPLACEMENT FOR WETCELL BATTERY AND INVERTER  
 SKINNER SCADA SERVERS RELOCATION  
 SMART-OPS (FORMERLY RTOS)  
 SOTO STREET FACILITY - BUILDING SEISMIC UPGRADE  
 SOTO STREET FACILITY - REPLACE HEATING  
 SOTO STREET FACILITY - ROOF REPLACEMENT  
 SOUTH COUNTY PIPELINE PROTECTION AT SAN JUAN CREEK CROSSING  
 SOUTH REACH / TUNNEL STUDY  
 SOUTH REACH CONSTRUCTION/ASBUILT - FUTURE UNAPPROPRIATED  
 SOUTH REACH DESIGN - FUTURE/UNAPPROPRIATED  
 SOUTH REACH ENVIRONMENTAL - FUTURE/UNAPPROPRIATED  
 SOUTH REACH FEASIBILITY STUDY  
 SOUTH REACH PROJECT MANAGEMENT - FUTURE/UNAPPROPRIATED  
 SOUTH REACH RIGHT OF WAY - FUTURE/UNAPPROPRIATED  
 SPECIAL SERVICE BRANCH - REPLACE PLATE BENDING  
 ST. JOHN'S CANYON CHANNEL EROSION MITIGATION  
 SYSTEM RELIABILITY PROGRAM  
 TEMESCAL POWER PLANT REPLACE EMERGENCY GENERATOR  
 TREATED WATER CROSS CONNECTION PREVENTION - FINAL DESIGN & CONSTRUCTION  
 TREATED WATER CROSS CONNECTION PREVENTION - UNFUNDED WORK  
 TWO-WAY RADIO ENHANCEMENT - EMERGENCY SERVICES, FIRE CONTROL, EVACUATION & BLDG. MAINT.

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

**Description**

**Distribution Facilities**

TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BLDG. MAINTENANCE  
 UNDER GROUND STORAGE TANK DISPENSER SPILL CONTAINMENT & REMEDIATION  
 UNION STATION TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BUILDING MAINTENANCE  
 UPGRADE CATHODIC PROTECTION RECTIFIERS  
 UPGRADE HOLLYWOOD TUNNEL PORTAL SLEEVE VALVE EQUIPMENT  
 UPGRADE SUNSET GARAGE  
 UPPER FEEDER - SANTA ANA RIVER BRIDGE REPAIRS  
 UPPER FEEDER AIR ENTRAINMENT  
 UPPER FEEDER GATE REHABILITATION  
 UPPER FEEDER JUNCTION STRUCTURE SEISMIC UPGRADE  
 UPPER FEEDER SANTA ANA RIVER DISCHARGE PAD  
 UPPER FEEDER SERVICE CONNECTIONS UPGRADES  
 UPPER NEWPORT BAY BLOW-OFF STRUCTURE REHABILITATION  
 UPS SYSTEMS INSTALLATION AT FOOTHILL PCS  
 UPS SYSTEMS INSTALLATION AT PERRIS CONTROL STRUCTURE  
 UTILITY BUSINESS ARCHITECTURE (OBJECT MAPPING/MODELING)  
 VACUUM AIR RELEASE VALVE RELOCATION PILOT PROGRAM  
 VALLEY & LOS ANGELES DISTRIBUTION VALVE POSITION DISPLAY UPGRADE  
 VALVE PROCUREMENT  
 VIDEO CONFERENCE SYSTEM UPGRADE  
 VIDEOCONFERENCING UPGRADE  
 WADSWORTH PUMPING PLANT - MODIFICATION/REPAIRS OF FIFTY-NINE 6.9KV BREAKERS/CABINETS  
 WADSWORTH PUMPING PLANT CONDUIT REPAIR AND PROTECTION  
 WADSWORTH PUMPING PLANT FOREBAY GANTRY CRANE UPGRADE  
 WADSWORTH PUMPING PLANT RECOATING 144" YARD PIPING  
 WADSWORTH PUMPING PLANT STOP LOGS ADDITION - STUDY  
 WATER DELIVERY SYSTEM AUTOMATION  
 WATER PLANNING APPLICATION  
 WATER QUALITY - REMOTE MONITORING  
 WATER QUALITY LABORATORY BUILDING EXPANSION  
 WATER QUALITY MONITORING AND EVENT DETECTION SYSTEM  
 WATER TREATMENT PROCESS OPTIMIZATION  
 WEST COAST FEEDER - CATHODIC PROTECTION SYSTEMS  
 WEST OC FEEDER VALVE REPLACEMENT  
 WEST VALLEY AREA STUDY  
 WEST VALLEY FEEDER # 1 STAGE 2 VALVE STRUCTURE MODIFICATIONS - CONSTRUCTION  
 WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURES IMPROVEMENTS  
 WEST VALLEY FEEDER NO. 1 VALVE STRUCTURE MODIFICATIONS  
 WESTERN REGION PLUMBING RETROFIT  
 WEYM. PL/TA VERNE FAC-BACKFLO PREV ASSY  
 WEYMOUTH - BUILDING NO. 4 - HAND RAIL AND STAIRS ADDITION  
 WEYMOUTH - FLAG POLE AREA LANDSCAPE UPGRADE  
 WEYMOUTH ASPHALT REHABILITATION  
 WEYMOUTH COMPRESSED AIR SYSTEM  
 WEYMOUTH DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT #1396  
 WFP - ASPHALT REHABILITATION  
 WFP - COMPRESSED AIR SYSTEM IMPROVEMENT  
 WFP - LAND ACQUISITION  
 WFP - PURCHASE OF REAL PROPERTY  
 WFP - REPAIR TO BLDG # 1  
 WFP - REPLACE ACTUATORS/OPERATORS/ MOTORS FOR EFFLUENT VALVE CONVERSION FILTER BEDS 1-24  
 WFP - WASHWATER RECLAMATION (WWRP)  
 YORBA LINDA FDR STA 924+11 PORTAL ACCESS  
 YORBA LINDA FEEDER - STA 924+11 PORTAL ACCESS  
 YORBA LINDA FEEDER BYPASS  
 YORBA LINDA PORTAL STRUCTURE ACCESS/TELEGRAPH CREEK BRIDGE

**Sub-total Distribution facilities benefits** \$ 73,144,882

**Sub-total Conveyance and Distribution facilities benefits** \$ 155,929,608

TABLE 4

**FISCAL YEAR 2016/17  
ESTIMATED READINESS-TO-SERVE CHARGE REVENUE**

<b>Member Agency</b>	<b>Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2004/05 - FY2013/14</b>	<b>RTS Share</b>	<b>6 months @ \$153 million per year (7/16-12/16)</b>	<b>Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2005/06 - FY2014/15</b>	<b>RTS Share</b>	<b>6 months @ \$135 million per year (1/17-6/17)</b>	<b>Total RTS Charge FY 2016/17</b>
Anaheim	21,646	1.26%	965,812	20,890	1.22%	822,387	1,788,198
Beverly Hills	11,468	0.67%	511,693	11,386	0.66%	448,235	959,928
Burbank	12,769	0.74%	569,715	12,817	0.75%	504,598	1,074,313
Calleguas MWD	110,216	6.43%	4,917,644	109,124	6.36%	4,296,031	9,213,675
Central Basin MWD	53,106	3.10%	2,369,501	51,539	3.01%	2,029,003	4,398,504
Compton	2,222	0.13%	99,150	1,924	0.11%	75,756	174,907
Eastern MWD	98,854	5.77%	4,410,675	98,628	5.75%	3,882,806	8,293,482
Foothill MWD	9,999	0.58%	446,114	9,790	0.57%	385,395	831,509
Fullerton	9,902	0.58%	441,799	9,668	0.56%	380,620	822,419
Glendale	20,157	1.18%	899,367	19,594	1.14%	771,369	1,670,736
Inland Empire Utilities Agency	60,390	3.52%	2,694,504	60,811	3.55%	2,394,010	5,088,513
Las Virgenes MWD	22,702	1.32%	1,012,933	22,750	1.33%	895,608	1,908,541
Long Beach	33,643	1.96%	1,501,086	34,316	2.00%	1,350,941	2,852,027
Los Angeles	297,705	17.36%	13,283,020	312,096	18.20%	12,286,660	25,569,680
Municipal Water District of Orange County	220,916	12.88%	9,856,838	221,545	12.92%	8,721,831	18,578,669
Pasadena	21,506	1.25%	959,574	21,181	1.24%	833,843	1,793,417
San Diego County Water Authority	377,077	21.99%	16,824,451	367,123	21.41%	14,452,980	31,277,430
San Fernando	122	0.01%	5,457	82	0.00%	3,240	8,697
San Marino	1,000	0.06%	44,614	931	0.05%	36,644	81,258
Santa Ana	13,091	0.76%	584,077	12,605	0.74%	496,221	1,080,298
Santa Monica	10,146	0.59%	452,704	9,252	0.54%	364,251	816,955
Three Valleys MWD	66,509	3.88%	2,967,508	65,261	3.81%	2,569,222	5,536,730
Torrance	18,514	1.08%	826,068	18,130	1.06%	713,750	1,539,818
Upper San Gabriel Valley MWD	18,292	1.07%	816,140	22,143	1.29%	871,739	1,687,879
West Basin MWD	128,160	7.47%	5,718,230	125,379	7.31%	4,935,938	10,654,168
Western MWD	74,439	4.34%	3,321,325	75,617	4.41%	2,976,923	6,298,248
<b>MWD Total</b>	<b>1,714,552</b>	<b>100.00%</b>	<b>\$ 76,500,000</b>	<b>1,714,580</b>	<b>100.00%</b>	<b>\$ 67,500,000</b>	<b>\$ 144,000,000</b>

Totals may not foot due to rounding

**TABLE 5**  
**FISCAL YEAR 2015/16**  
**ESTIMATED STANDBY CHARGE REVENUE**

<b>Member Agencies</b>	<b>Total Parcel Charge</b>	<b>Number Of Parcels Or Acres</b>	<b>Gross Revenues (Dollars) <sup>1</sup></b>
Anaheim	\$ 8.55	68,113	\$ 582,362
Beverly Hills	-	-	-
Burbank	14.20	29,055	412,577
Calleguas MWD	9.58	259,212	2,483,251
Central Basin MWD	10.44	339,675	3,546,211
Compton	8.92	18,091	161,372
Eastern MWD	6.94	398,973	2,768,876
Foothill MWD	10.28	30,335	311,842
Fullerton	10.71	34,708	371,724
Glendale	12.23	44,900	549,130
Inland Empire Utilities Agency	7.59	255,066	1,935,952
Las Virgenes MWD	8.03	55,303	444,082
Long Beach	12.16	91,968	1,118,332
Los Angeles	-	-	-
Municipal Water District of Orange County <sup>2</sup>	10.09	718,283	7,378,409
Pasadena	11.73	38,952	456,901
San Diego County Water Authority	11.51	1,104,307	12,710,571
San Fernando	7.87	5,115	40,258
San Marino	8.24	4,968	40,935
Santa Ana	7.88	54,201	427,105
Santa Monica	-	-	-
Three Valleys MWD	12.21	152,015	1,856,103
Torrance	12.23	40,460	494,820
Upper San Gabriel Valley MWD	9.27	211,919	1,964,492
West Basin MWD	-	-	-
Western MWD	9.23	386,694	3,569,189
<b>MWD Total</b>		<b>4,342,313</b>	<b>\$ 43,624,493</b>

(1) Estimates per FY2015/16 applied amounts

(2) Adjusted for inclusion of Coastal MWD

Note: Totals may not foot due to rounding.

