THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

RESOLUTION 9307

RESOLUTION OF THE BOARD OF DIRECTORS OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA CONTINUING THE WATER STANDBY CHARGE FOR FISCAL YEAR 2022/23

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

1. At its meeting on April 13, 2021, the Board adopted Resolution 9277 "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, 2022;"

2. At its meeting on April 12, 2022, the Board adopted Resolution 9303 "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, 2023;"

3. Certain member public agencies ("member agencies") of Metropolitan have elected to pay all or a portion of their Readiness-to-Serve ("RTS") Charge obligation through the continuance of the Metropolitan water standby charge ("Standby Charge") collected from parcels within those member agencies;

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

5. Section 134.5 of the Metropolitan Water District Act authorizes the Board to collect a service charge from member agencies or, as an alternative, to collect a service charge as a standby charge against individual parcels within the district;

6. Metropolitan first established the Standby Charge in 1992, pursuant to the procedures authorized by Section 134.5 of the Metropolitan Water District Act and the Uniform Standby Charge Procedures Act ("USCPA"), Sections 54984-54984.9, inclusive, of the Government Code;

7. The Standby Charge has not exceeded the rates set in fiscal year 1993/94, and in fiscal year 1995/96 was reduced to $0.00 for the member agencies electing not to have any portion of their RTS Charge obligation collected through the Standby Charge;

8. The Standby Charge is not subject to the procedures set forth in Article XIII D, Section 4 of the California Constitution effective July 1, 1997 (Proposition 218), as the Standby Charge has not exceeded the rates set in fiscal year 1993/94, has not exceeded the amount of the Standby Charge existing in fiscal year 1996/97 when Proposition 218 became effective, and the proceeds of the Standby Charge are used for purposes specified in Section 5 of Article XIII D; and

9. The particular charge, per acre or per parcel, applicable to land within each member agency, the method of its calculation, and the specific data used in its determination are as specified in the Engineer's Report dated April 2022, supporting the RTS Charge and Standby Charge option (the "Engineer's Report"), which is attached hereto and on file with the Board Executive Secretary of Metropolitan; and

10. Written notice of the intention of Metropolitan's Board to consider and take action at its regular meeting of May 10, 2022, to continue the Standby Charge for fiscal year 2022/23 was given to each of

Metropolitan's member agencies.

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, pursuant to the Engineer's Report, finds that lands within Metropolitan are benefited as described in such report and on that basis, hereby continues its Standby Charge for fiscal year 2022/23 on lands within requesting member agencies of Metropolitan to which water is made available for any purpose, whether water is actually used or not, as specified in the Engineer's Report.

Section 2. That the rates of such Standby Charge, per acre of land, or per parcel of land less than an acre, as shown in the Engineer's Report, may vary by member agency, and shall not exceed the amount of the fiscal year 1996/97 Standby Charge for the member agency. The Standby Charge applicable to each electing member agency, the method of its calculation, and the specific data used in its determination are as specified in the Engineer's Report which was prepared by a registered professional engineer certified by the state of California, which methodology is in accordance with Section 134.5 of the Metropolitan Water District Act and reflects the range of costs provided in Metropolitan's Fiscal Years 2022/23 and 2023/24 Cost of Service Report for Proposed Rates and Charges.

Section 3. That the Standby Charge, per acre of land, or per parcel of land less than an acre, applicable to land within each electing member agency as allocated in the Engineer's Report shall be as follows for fiscal year 2022/23:

2022/23 Water Standby Charge

Member Agency	**Amount**
Anaheim	$8.55
Beverly Hills	---
Burbank	14.20
Calleguas MWD	9.58
Central Basin MWD	10.44
Inland Empire Utilities Agency	7.59
Coastal MWD*	11.60
Compton	2.49
Eastern MWD	6.94
Foothill MWD	10.28
Fullerton	10.71
Glendale	12.23
Las Virgenes MWD	8.03
Long Beach	12.16
Los Angeles	---
MWD of Orange Co.**	10.09
Pasadena	11.73
San Diego CWA	11.51
San Fernando	0.00
San Marino	8.24
Santa Ana	7.88
Santa Monica	---
Three Valleys MWD	12.21
Torrance	12.23
Upper San Gabriel Valley MWD	9.27
West Basin MWD	--
Western MWD of Riverside Co.	9.23

* Applicable to parcels included within territory of former Coastal MWD.

** Exclusive of parcels included within territory of former Coastal MWD.

Section 4. That the Standby Charge shall continue to be collected on the tax rolls, together with the *ad valorem* property taxes that are levied by Metropolitan for the payment of pre-1978 voter approved indebtedness. The amounts of the Standby Charge are continued at amounts that are not estimated to exceed a member agency's RTS Charge obligation. However, any amounts collected shall be applied as a credit against the applicable member agency's RTS Charge obligation. After such member agency's RTS Charge allocation is fully satisfied, any additional collections shall be credited to other outstanding obligations of such member agency to Metropolitan that funds the capital costs or maintenance and operation expenses for Metropolitan's water system, or future RTS Charge obligations of such agency. Any member agency requesting to have all or a portion of its RTS Charge obligation collected through the Standby Charge levies within its territory as provided herein shall pay any portion not collected through net Standby Charge collections to Metropolitan within fifty (50) days after Metropolitan issues an invoice for the remaining RTS Charge obligations for such member agency, as provided in Administrative Code Section 4507.

Section 5. That the following exemption procedures apply:

(a) It is the intent of the Board that the following lands shall be exempt from the Standby Charge: (1) lands owned by the Government of the United States, the state of California, or by any political subdivision thereof or any entity of local government; (2) lands permanently committed to open space and maintained in their natural state that are not now and will not in the future be supplied water; (3) lands not included in (1) or (2) above, which the General Manager, in his discretion, finds do not now and cannot reasonably be expected to derive a benefit from the projects to which the proceeds of the Standby Charge will be applied; and (4) lands within any member public agency, subagency, or city if the governing body of such public entity elects and commits to pay out of funds available for that purpose, in installments at the time and in the amounts established by Metropolitan, the entire amount of the Standby Charge which would otherwise be collected from lands within those public entities. However, no exemption from the Standby Charge shall reduce the applicable member agency's RTS Charge obligation. The General Manager may develop and implement additional criteria and guidelines for exemptions in order to effectuate the intent expressed herein.

(b) The General Manager shall establish and make available to interested applicants procedures for filing and consideration of applications for exemption from the Standby Charge pursuant to subsections (2) and (3) of Section 5(a) above. All applications for such exemption and documents supporting such claims must be received by Metropolitan in writing on or before December 31, 2022. The General Manager is further directed to review any such applications for exemption submitted in a timely manner to determine whether the lands to which they pertain are eligible for such exemption and to allow or disallow such applications based upon those guidelines. The General Manager shall also establish reasonable procedures for the filing and timing of the appeals from his determination. The procedures will be on file and available for review by interested parties at Metropolitan's headquarters.

(c) The Finance and Insurance Committee of Metropolitan's Board of Directors shall hear appeals from determinations by the General Manager to deny or qualify an application for exemption from the Standby Charge. The Finance and Insurance Committee shall consider such appeals and make recommendations to the Board to affirm or reverse the General Manager's determinations. The Board shall act upon such recommendations and its decision as to such appeals shall be final.

Section 6. That no exemption from the Standby Charge shall reduce the applicable member agency's RTS Charge obligation, nor shall any failure to collect, or any delay in collecting, any Standby Charge excuse or delay payment of any portion of the RTS Charge when due.

Section 7. That the RTS Charge is collected by Metropolitan as a rate, fee or charge from 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, any portion thereof, or the collection of the Standby Charge, 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 the continuation of the Metropolitan Standby Charge as a means of collecting its RTS Charge obligation shall pay such RTS Charge obligation in full, as if such Standby Charge had never been sought.

Section 8. That the General Manager is hereby authorized and directed to take all necessary action to secure the collection of the Standby Charge by the appropriate county officials, including payment of the reasonable cost of collection.

Section 9. 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 10. 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.

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 May 10, 2022.

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 SET A READINESS-TO-SERVE CHARGE EFFECTIVE JANUARY 1, 2023,

INCLUDING LOCAL OPTION TO CONTINUE COLLECTING A STANDBY CHARGE, DURING FISCAL YEAR 2022/23

April 2022

BACKGROUND

The Metropolitan Water District of Southern California is a public agency with a primary purpose to provide imported wholesale water service for domestic and municipal uses to its 26 member public agencies. Approximately 19 million people reside within Metropolitan's service area, which covers approximately 5,200 square miles and includes portions of the six counties of Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura. Metropolitan historically provided between 40 and 60 percent of the water used within its service area. To supply Southern California with reliable and safe water, Metropolitan imports water from the Colorado River and Northern California to supplement its member agencies' local supplies, and helps its member agencies develop increased water conservation, recycling, storage and other local resource programs.

REPORT PURPOSES

As part of its role as a regional imported water supplier, Metropolitan builds capital facilities and implements water management programs that ensure the delivery of reliable high-quality water supplies throughout its service area. The purpose of this report is to: (1) identify and describe those facilities and programs that will be financed in part by Metropolitan's Readiness-to-Serve (RTS) Charge, and (2) describe the method and basis for levying Metropolitan's Standby Charge for those agencies electing to continue to collect a portion of their RTS obligation through Metropolitan's Standby Charge in fiscal year 2022/23. **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 2022 was adopted by Metropolitan's Board on April 13, 2021 and the RTS Charge for 2023 will be considered by the Board on April 12, 2022. The Board will consider the continuation of the Standby Charge for fiscal year 2022/23 on May 10, 2022.

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

The budgeted total RTS revenue for fiscal year 2022/23 is $147.0 million, of which $44.0 million is estimated to be collected via the Standby Charge. The Standby Charge is collected on property tax bill.

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

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

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

CAPITAL FACILITIES — CONVEYANCE AND DISTRIBUTION

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

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

The system draws on diverse supply sources, transports water across a large part of the State and distributes water in six counties, where member agencies or their retail sub-agencies serve an estimated 19 million people. The CRA and the California Aqueduct of the SWP convey imported water into the Metropolitan service area. This water is then delivered to Metropolitan's member agencies via a regional network of canals, pipelines, and appurtenant facilities, which constitute the Distribution System. Supply, treatment, and storage facilities augment the Distribution System. The system is an interconnected regional conveyance and distribution system with the ability to deliver supplies from each of the SWP, the CRA, and its storage portfolio throughout its vast and diverse service area to almost every member agency. This flexibility derives from the capital facilities and provides local and system-wide benefits to all member agencies, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area.

As the 2007 Integrated Area Study (IAS) emphasized, regional system flexibility is a key component of overall reliability.[1] Today, system flexibility continues to be essential to the availability of Metropolitan's services.[2] Metropolitan must maintain operational flexibility—the ability to respond to short-term changes in regional water supply, water quality, treatment requirements, and member agency demands. Metropolitan must maintain delivery flexibility—the ability to maintain partial to full water supply deliveries during planned and unplanned facility outages. Metropolitan is also required by state statute to serve as large an area as is determined to be reasonable and practical with SWP water; and where a blend of water sources is served, to have the objective to the extent determined to be reasonable and practical, that at least 50 percent of the blend be SWP water. (MWD Act, Sec. 136.)

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

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

State Water Project Description and Benefits

One of Metropolitan's two major sources of water is the SWP.[3] The SWP is the largest state-built, multipurpose, user-financed water project in the country. It was designed and built primarily to deliver water, but also provides flood control, generates power for pumping, is used for recreation, and enhances habitat for fish and wildlife.

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

[1] 2007 Integrated Area Study, Report No. 1317, pg. 2-10.
[2] 2022 Annual Operating Plan, pg. 6-10
[3] For historical and current information regarding the SWP, refer to Bulletin 132, published periodically by DWR since 1963. The most recently published Bulletin is Bulletin 132-18 dated January 2021 and titled "Management of the California State Water Project. Appendices to the Bulletin are also updated separately. Both are available at: https://water.ca.gov/Programs/State-Water-Project/Management/Bulletin-132.

Figure 1. Facilities of the State Water Project



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

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

Since 1960, the SWP system has been extended, improved, and refurbished. All such costs are payable by the Contractors. California WaterFix was a comprehensive science-based solution proposed by the state to modernize critical water delivery infrastructure of the SWP. On October 10, 2017, Metropolitan's Board voted to support financing for the California WaterFix project. However, the state terminated the project in April 2019. Consistent with the Governor's Executive Order N-10-19, the state then announced a new single tunnel Delta conveyance project, which was notably included as part of the Governor's 2020 Water Resilience Portfolio. In 2019, DWR initiated planning and environmental review for a single tunnel Delta Conveyance Project (DCP) to protect the future reliability of access to SWP supplies. In December 2020, the Metropolitan Board authorized the General Manager to execute agreements for (a) funding a share of up to 60.2 percent for planning and pre-construction costs for the DCP, and (b) an amendment to the Joint Powers Agreement for the Delta Conveyance Design and Construction Joint Powers Authority. A Delta conveyance project will contribute to the improvement of capital facilities needed to meet demands on Metropolitan's system for emergency storage and available capacity to meet outages and hydrologic variability. Metropolitan's biennial budget for fiscal years 2022/23 and 2023/24 includes Metropolitan's planned contribution of $99.0 million for DWR's planning costs of a new Delta conveyance project.

All Metropolitan member agencies benefit from the SWP system and its supplies, which can be distributed to all member agencies. Metropolitan's member agencies distribute that water to parcels as retail water providers or as wholesale water providers to retail agencies. In this way, the SWP water that Metropolitan delivers to its member agencies contributes to water available to existing and future end users throughout Metropolitan's service area. The cost of the net capital payments for the SWP less the portion covered by property taxes in fiscal year 2022/23 is $60.7 million, as shown in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the SWP facilities and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only $44.0 million of the total $312.9 million system costs, representing 14% of the total system costs.

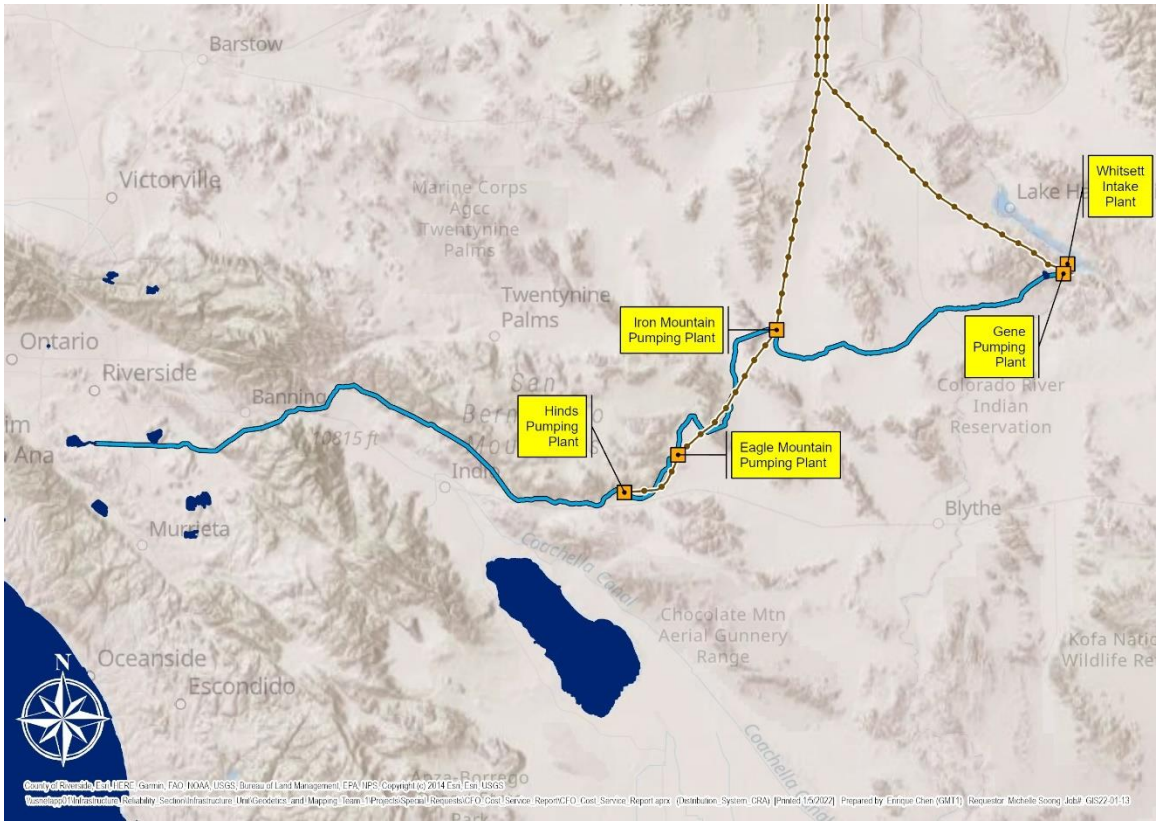
Colorado River Aqueduct Description and Benefits

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

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

improvements as assets. The costs of Metropolitan's capital financing activities are apportioned to cost functions, such as the CRA Conveyance and Aqueduct function. The capital cost of the Colorado River Aqueduct and Inland Feeder in fiscal year 2022/23 is $76.3 million, and is included in the Non-SWP Conveyance System line item in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the CRA facilities and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only $44.0 million of the total $312.9 million system costs, representing 14% of the total system costs.

Figure 2. Colorado River Aqueduct



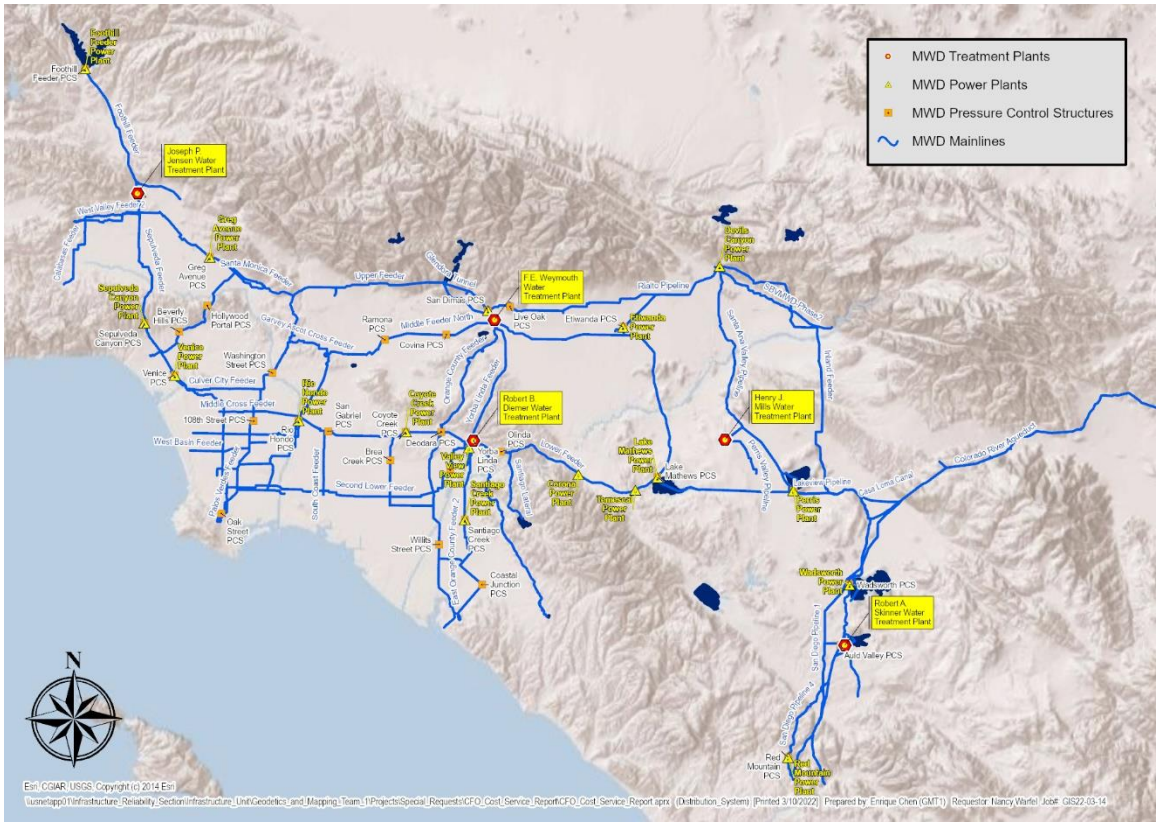
Metropolitan's Conveyance and Distribution System Benefits

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

All water transport facilities not specifically identified as part of the regional conveyance system are considered to be distribution facilities (Distribution System). While conveyance and aqueduct system components are regional in nature and generally do not link directly to local agency distribution systems, Distribution System facilities do ultimately connect to local agency systems. As a result, these facilities rely on conveyance and aqueduct facilities

to import water from regional supply sources. The Distribution System is a complex network of facilities which routes water from the CRA and SWP to the member agencies. Beginning at the terminal delivery points of the CRA and SWP, Metropolitan's Distribution System includes approximately 775 miles of pipelines, feeders, and canals. Distribution System operations are coordinated from the Operations Control Center in Eagle Rock. The control center plans, schedules, and balances daily water operations in response to member agency demands and the operational limits of the system as a whole. Metropolitan's storage and treatment facilities augment the Distribution System. Metropolitan operates and maintains separate untreated and treated distribution facilities.

Figure 3. Metropolitan's Distribution and Storage Facilities



Metropolitan has an ongoing commitment, through physical system improvements and the maintenance and rehabilitation of existing facilities, to maintain the reliable delivery of water throughout the entire service area. System improvement projects include additional conveyance and distribution facilities to maintain the dependable delivery of water supplies, provide alternative system delivery capacity, and enhance system operations. Conveyance and distribution system improvement benefits also include projects to upgrade obsolete facilities or equipment, or to rehabilitate or replace facilities or equipment. These projects are needed to enhance system operations, comply with new regulations, and maintain a reliable distribution system. A list of conveyance and distribution system facilities is provided in Table 3 along with the fiscal year 2022/23 estimated conveyance and distribution system benefits. The capital cost of the Distribution System in fiscal year 2022/23 is $76.4 million, and is included in the Distribution System line item in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the Distribution System and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only $44.0 million of the total $312.9 million system costs, representing 14% of the total system costs.

CAPITAL FACILITIES – WATER STORAGE

System Storage Benefits

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

Water stored in system storage during above average supply conditions (surplus) provides a reserve against shortages when supply sources are limited or disrupted. Water storage also preserves Metropolitan's capability to deliver water during scheduled maintenance periods, when conveyance facilities must be removed from service for rehabilitation, repair, or maintenance. The benefits of these capital facilities are both local and system-wide, as the facilities directly contribute to the reliable delivery of water supplies throughout Metropolitan's service area. The capital costs of water storage in fiscal year 2022/23 is $99.5 and, as shown in Table 1. Real property throughout Metropolitan's service area benefits from the availability of the storage capacity throughout the service area and its integration into Metropolitan's system and therefore all such costs may be attributed to such parcels. However, Metropolitan's Standby Charge collects only $44.0 million of the total $312.9 million system costs, representing 14% of the total system costs.

METROPOLITAN'S REVENUE

Metropolitan's major capital facilities are financed largely from the proceeds of revenue bond issues, which are repaid over future years. The principal source of revenue for repayment of these bonds is water sales to its member agencies, which is currently Metropolitan's largest source of revenue. In addition, *ad valorem* property taxes provide an additional limited revenue source, which is used to pay pre-1978 voter-approved indebtedness. However, the use of water rates as a primary source of revenue has placed an increasing burden on member agencies and their ratepayers, which would more equitably continue to be paid in part by assessments on land that in part derives its value from the availability of water through an integrated and reliable water system.

Readiness-To-Serve

In December 1993, Metropolitan's Board approved a revenue structure that included additional charges to establish a commitment to Metropolitan's capital improvement program and provide revenue stability. This revenue structure included the RTS Charge, which in 1995 certain member agencies opted to pay in part pursuant to the collection of a standby charge. In October 2001, the Board adopted the current unbundled rate structure, and maintained the RTS Charge.

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

The estimated fiscal year 2022/23 RTS Charge for each member agency is shown in Table 4.

Standby Charge Option

Metropolitan's Standby Charge is authorized by the State Legislature and has been levied by Metropolitan since fiscal year 1992/93. The Standby Charge recognizes that there are economic benefits to lands that have access to

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

Although a standby charge could have been set to recover all Conveyance, Distribution, and Storage costs as detailed in Table 1, Metropolitan's continued Standby Charge only collects about 14% of those costs. For fiscal year 2022/23, the amount to be recovered by the RTS Charge is estimated to be $147.0 million and of that only $44.0 million is estimated to be recovered by the Standby Charge.

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

The Standby Charge is proposed to be collected from: (1) parcels on which water standby charges have been levied in fiscal year 1993/94 and annually thereafter and (2) parcels annexed to Metropolitan and to an electing member agency after January 1997. Table 6 lists parcels annexed, or to be annexed, to Metropolitan and to electing member agencies during fiscal year 2020/21, such parcels being subject to the Standby Charge upon annexation.

The estimated costs of Metropolitan's wholesale water system, which could be paid by a Standby Charge, are approximately $312.9 million for fiscal year 2022/23, as shown in Table 1. An average total Standby Charge of about $72.26 per acre of land or per parcel of land less than one acre would be necessary to pay for the total potential program benefits. Benefits in this amount will accrue to each acre of property and parcel within Metropolitan's service area, as Metropolitan delivers water to member agencies that contributes to water available to these properties, via that member agency or a retail sub-agency. Because Metropolitan's water deliveries to member agencies contributes to water available only to properties located within Metropolitan's service area boundaries (except for certain contractual deliveries as permitted under Section 131 of the Metropolitan Water District Act), any benefit received by the public at large or by properties outside of the area is merely incidental.

Table 5 shows that the distribution of Standby Charge revenues from the various member agency service areas would provide net revenue flow of approximately $44.0 million for fiscal year 2022/23. 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 costs. Additionally, the actual Standby Charge proposed to be continued ranges from $2.49 to $15 per acre of land or per parcel of land less than one acre. Thus, the benefits of Metropolitan's investments in water conveyance, storage, and distribution far exceed the recommended Standby Charge.

Equity

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

Metropolitan's water system increases the availability and reliable delivery of water throughout Metropolitan's service area. A reliable system benefits existing end users and land uses through retail water service provided by Metropolitan member agencies or by water retailers that purchase water from a Metropolitan member agency, and through the replenishment of groundwater basins and reservoir storage as reserves against shortages due to droughts, natural emergencies, or scheduled facility shutdowns for maintenance. The benefits of reliable water resources from the SWP, CRA, Storage, and system improvements accrue to more than 250 cities and communities within Metropolitan's six-county service area. Metropolitan's regional water system is interconnected, so water supplies from the SWP and CRA can be used throughout most of the service area and therefore benefit water users and properties system-wide.

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

SUMMARY

The foregoing and the attached tables describe the current costs of Metropolitan's system and benefits provided by the projects listed as mainstays to the water system for Metropolitan's service area. Benefits are provided to member agencies, their retail sub-agencies, water users and property owners. The projects represented by this report provide both local benefits as well as benefits throughout the entire service area. It is recommended, for calendar year 2023, that the Metropolitan Board of Directors adopt the RTS Charge as set forth in Table 4 with an option for local agencies to request that a Standby Charge be collected for fiscal year 2022/23 from lands within Metropolitan's service area as a credit against such member agency's RTS Charge, up to the Standby Charge amounts collected by Metropolitan within the applicable member agency for fiscal year 1996/97. The maximum Standby Charge would not exceed $15 per acre of land or per parcel of less than one acre. The costs of the system described in this Engineer's Report exceeds the recommended Standby Charge by at least $268 million. A preliminary listing of all parcels subject to the proposed 2022/23 Standby Charge and the amounts proposed to be continued for each is available in the office of the Chief Financial Officer. A final listing is available upon receipt of final information from each county.

Prepared Under the Supervision of:

Brad Coffey

Brad Coffey, RCE C52169
Group Manager
Water Resource Management



Prepared Under the Supervision of:

Katano Kasaine

Katano Kasaine
Assistant General Manager/
Chief Financial Officer

TABLE 1

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

		Estimated Program Costs for FY2022/23	Dollars Per Parcel of 1 Acre or Less
Capital Payments for Water System Infrastructure			
Net Capital Payments to State Water Project (SWP) (less portion paid by property taxes)	$	60,722,840	$14.02
Non Tax Supported Capital Costs for Non-SWP Conveyance System [1]	$	76,253,010	$17.61
Non Tax Supported Capital Costs for Distribution System [2]	$	76,379,326	$17.64
Non Tax Supported Capital Costs for Water Storage [3]	$	99,537,336	$22.99
Total Capital Payments	**$**	**312,892,512**	**$72.26**
Estimated Standby Charge Revenues	$	44,002,818	$10.16
Percent Collected by Standby Charge		14%	
Total Remaining Costs Not Paid by Standby Charge	**$**	**268,889,693**	**$62.10**

Notes:

[1] Non-SWP Conveyance include the Colorado River Aqueduct and Inland Feeder.

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

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

Totals may not foot due to rounding

TABLE 2

WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS

Project Name	FISCAL YEAR 2022/23 Payment
Water Recycling Projects	**$7,706,314**
Alamitos Barrier Reclaimed Water Project	
Anaheim Water Recycling Demonstration Project	
Burbank Recycled Water System Expansion Phase II Project	
CBMWD Recycled Water System Expansion Phase I	
Development of Non-Domestic Water System in Ladera Ranch and Talega Valley	
Direct Reuse Project Phase IIA	
Dry Weather Runoff Reclamation Facility	
Eastern Recycled Water Pipeline Reach 16 Project	
El Toro Phase II Recycled Water Distribution System Expansion Project	
El Toro Recycled Water System Expansion	
Elsinore Valley Recycled Water Program	
EMWD Recycled Water System Expansion Project	
Escondido Regional Reclaimed Water Project	
Glendale Verdugo-Scholl and Brand Park Project	
Griffith Park South Water Recycling Project	
Groundwater Reliability Improvement Program Recycled Water Project	
Hansen Area Water Recycling Phase I Project	
Hansen Dam Golf Course Water Recycling Project	
Harbor Water Recycling Project	
Lake Mission Viejo Advanced Purification WTF	
Leo J. Vander Lans Water Treatment Facility Expansion Project	
Long Beach Reclaimed Water Master Plan Phase I System Expansion	
Los Angeles Taylor Yard Park Water Recycling Project	
Michelson/Los Alisos Water Reclamation Plant Upgrades and Distribution System Expansion Project	
North Atwater Area Water Recycling Project	
North City Water Reclamation Project	
North Hollywood Area Water Recycling Project	
Otay Recycled Water System	
Oxnard Advanced Water Purification Facility Project	

TABLE 2 (Continued)

WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS

Project Name	FISCAL YEAR 2022/23 Payment
Water Recycling Projects (continued)	
Padre Dam MWD Reclaimed Water System Phase I	
Rowland Water District Portion of the City of Industry Regional Recycled Water Project	
San Clemente Recycled Water System Expansion Project	
San Elijo Water Reclamation System	
Santa Maria Water Reclamation Project	
Sepulveda Basin Sports Complex Water Recycling Project	
Sepulveda Basin Water Recycling Project - Phase 4	
Terminal Island Recycled Water Expansion Project	
USGVMWD Portion of the City of Industry Regional Recycled Water Project	
Van Nuys Area Water Recycling Project	
Walnut Valley Water District Portion of the City of Industry Regional Recycled Water Project	
West Basin Water Recycling Program Phase V Project	
Westside Area Water Recycling Project	

TABLE 2 (Continued)

WATER RECYCLING, GROUNDWATER RECOVERY AND CONSERVATION PROJECTS

Project Name	FISCAL YEAR 2022/23 Payment
Groundwater Recovery Projects	**$11,469,103**
Beverly Hills Desalter Project	
Cal Poly Pomona Water Treatment Plant	
Capistrano Beach Desalter Project	
Chino Basin Desalination Program / IEUA	
Chino Basin Desalination Program / Western	
Colored Water Treatment Facility Project	
Irvine Desalter Project	
IRWD Wells 21 & 22 Desalter Project	
Madrona Desalination Facility (Goldsworthy Desalter) Project	
Menifee Basin Desalter Project	
North Pleasant Valley Regional Desalter	
Perris II Brackish Groundwater Desalter	
Pomona Well #37-Harrison Well Groundwater Treatment Project	
Round Mountain Water Treatment Plant	
San Juan Basin Desalter Project	
Temescal Basin Desalting Facility Project	
On-site Retrofit Program	**$3,000,000**
Future Supply Actions	**$3,639,900**
Conservation Projects	**$25,000,000**
Regionwide Residential	
Regionwide Commercial	
Member Agency Administered/MWD Funded	
Water Incentive Savings Program	
Landscape Training Classes	
Landscape Irrigation Surveys	
Pilot programs/Studies	
Inspections	
Landscape Transformation Program (Turf Removal)	
Disadvantaged Communities Program	

Total Demand Management Programs	**$50,815,317**

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Storage Facilites

ALAMEDA CORRIDOR, PIPELINE RELOCATION, PROTECTION
CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN $250,000-LIVE OAK
CAPITAL PROGRAM FOR PROJECTS COSTING LESS THAN $250,000-MORRIS DAM
CHINO BASIN GROUNDWATER SERVICE CONNECTION CB-15T
CHLORINATION AND PH CONTROL FACILITIES- ORANGE COUNTY & GARVEY (50/50)
CLEARING OF LAKE MATHEWS RESERVOIR AREA
CONVERSION OF DEFORMATION SURVEY MONITORING AT COPPER BASIN
COPPER BASIN AND GENE WASH DAM, INSTALL SEEPAGE ALARM (50/50)
COPPER BASIN RESERVOIR SUPERVISORY CONTROL
COPPER BASIN SEWER SYSTEM
CORONA DEL MAR RESERVOIR- REPLENISHMENT
CORONA DEL MAR RESERVOIR-: CHLORINATION STATION
CRANE - LAKE MATHEWS OUTLET TOWER (ORG CONST)
DAM MONITORING SYSTEM UPGRADES - Lake Mathews
DAM MONITORING SYSTEM UPGRADES - LAKE SKINNER
DAM SEISMIC ASSESSMENT - PHASE 3
DAM SEISMIC UPGRADES - PHASE 3
DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADE
DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADES - STAGE 3
DIAMOND VALLEY LAKE DAM MONITORING SYSTEM UPGRADES - STAGES 1 & 2
DIAMOND VALLEY LAKE INLET/OUTLET TOWER FISH SCREEN REPLACEMENT - CONSTRUCTION
DIAMOND VALLEY LAKE MONITORYING SYSTEM UPGRADES
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-PALOS VERDES RESERVOIR (INTERIM CONST)
DVL - SEARL PARKWAY EXTENSION - PHASE 2
DVL - SEARL PARKWAY LANDSCAPING
DVL EAST DAM ELECTRICAL UPGRADES
DVL EAST DAM POWER LINE REALIGNMENT
DVL INLET/OUTLET FISH SCREEN REHABILITATION
DVL RECREATION - ALTERNATE ACCESS ROAD
DVL RECREATION, COMMUNITY PARK AND REGIONAL AQUATIC FACILITY
DVL SECURITY ENHANCEMENT
DVL, CONSTRUCTION
DVL, CONSTRUCTION CLAIMS SUPPORT
DVL, CONSTRUCTION MANAGEMENT SERVICE
DVL, CONSTRUCTION SUPERVISION
DVL, CONSTRUCTION, WEST DAM FOUNDATION
DVL, DEDICATION CEREMONY
DVL, DISTURBED
DVL, DOMENIGONI PARK
DVL, EAST DAM
DVL, EAST DAM EMBANKMENT
DVL, EAST DAM FENCING
DVL, EAST DAM INLET OUTLET TOWER CONSTRUCTION
DVL, EAST DAM LANDSCAPE SCREENING
DVL, EAST DAM NORTH RIM REMEDIATION
DVL, EAST DAM P-1 FACILITIES
DVL, EAST DAM SITE COMPLETION
DVL, EAST DAM STATE STREET IMPROVEMENTS
DVL, EAST DAM VERTICAL SLEEVE VALVE
DVL, EAST MARINA, PHASE 2
DVL, EXCAVATION
DVL, FIXED CONE, SPHERE
DVL, GENERAL
DVL, GRADING OF CONT
DVL, INSTALL NEW WATERLINE
DVL, MISC SMALL CONS
DVL, NORTH HIGH WATER ROAD
DVL, P-1 PUMPING FACILITY
DVL, PROCUREMENT
DVL, SCOTT ROAD EXTENSION
DVL, SOUTH HIGH WATER ROAD & QUARRY
DVL, SPILLWAY
DVL, START UP
DVL, VALLEY-WIDE SITE ROUGH GRADING
DVL, WORK PACKAGE
DVL, WORK PACKAGE 1
DVL, WORK PACKAGE 10, INLET OUTLET WORK
DVL, WORK PACKAGE 11, FOREBAY
DVL, WORK PACKAGE 12, TUNNEL
DVL, WORK PACKAGE 13, P-1 PUMP OPERATIONS FACILITY
DVL, WORK PACKAGE 14, PC-1
DVL, WORK PACKAGE 15, SITE CLEARING
DVL, WORK PACKAGE 16, GROUNDWATER MONITORING
DVL, WORK PACKAGE 17, FIELD OFFICE
DVL, WORK PACKAGE 18, TEMPORARY VISITOR CENTER
DVL, WORK PACKAGE 19, PERMANENT VISITOR CENTER
DVL, WORK PACKAGE 2, EASTSIDE PIPELINE
DVL, WORK PACKAGE 20, EAST DAM EXCAVATION, FOUNDATION
DVL, WORK PACKAGE 21, WEST DAM EXCAVATION, FOUNDATION
DVL, WORK PACKAGE 23, WEST RECREATION AREA

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Storage Facilites

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
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 COVER AND LINER REPLACEMENT PROJECT
GARVEY RESERVOIR DRAINAGE & EROSION CONTROL IMPROVEMENTS
GARVEY RESERVOIR- EMERGENCY GENERATOR
GARVEY RESERVOIR- FLOATING COVER
GARVEY RESERVOIR HYPOCHLORITE FEED SYSTEM
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVE #1 - INTEREST
GARVEY RESERVOIR- JUNCTION STRUCTURE, REPLACE VALVES # 4 & 5
GARVEY RESERVOIR- MODIFY DESILTING BASINS
GARVEY RESERVOIR REPAIR
GARVEY RESERVOIR, LOWER ACCESS ROAD, PAVING & DRAINS
GARVEY RESERVOIR, REPLACE VALVE # 4 & 5
GARVEY RESERVOIR, TWO VALVES AT JUNCTION STRUCTURE
GARVEY RESERVOIR: CONT. 565, SPEC.412
GARVEY RESERVOIR: TWO COTTAGES WITH GARAGES
GARVEY RESERVOIR-HYPOCHLORINATION
GARVEY RESERVOIR-HYPOCHLORINE STATION
GARVEY RESERVOIR-INLET AND OUTLET CONDUIT SYSTEM MODIFICATION
GARVEY RESEVOIR-JUNCTION STRUCTURE REPLACE TWO VALVES
GARVEY RSVR REPLACE VENTURI THROAT SECTION
HEADWORKS OF DISTRIBUTION SYSTEM LAKE MATHEWS
HEADWORKS: ADDITIONAL VALVES
HEADWORKS: MOTOR OPERATED SLIDE GATES
HOUSE AND GARAGE AT CORONA DEL MAR RESERVOIR
HOUSE AND GARAGE AT ORANGE COUNTY RESERVOIR
HOUSE AT PALOS VERDES RESERVOIR
HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1939
HOWELL-BUNGER VALVE OPERATOR, LAKE MATHEWS, 5 VALVES 1955
JENSEN FINISHED WATER RESERVOIR NO. 1 COVER REHABILITATION
JENSEN FINISHED WATER RESERVOIR NO. 2 FLOATING COVER IMPROVEMENT
JENSEN FLUORIDE TANK REPLACEMENT
JENSEN FWR # 2 FLOATING COVER REPLACEMENT
JENSEN FWR NO. 2 FLOATING COVER REPLACEMENT
JENSEN, REPAIR COVER OVER RESERVOIR 1
LAKE MATHEWS - REPLACE STANDBY GENERATOR
LAKE MATHEWS - ELECTRICAL SYSTEM IMPROVEMENT

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Storage Facilites

LAKE MATHEWS ABOVEGROUND STORAGE TANK REPLACEMENT
LAKE MATHEWS BUILDING
LAKE MATHEWS BUILDINGS 8 & 15, RENOVATION OF ASSEMBLY AREA AND ADMIN. BLDG.
LAKE MATHEWS- CARPENTER AND VEHICLE MAINTENANCE BUILDING
LAKE MATHEWS- CHLORINATION FACILITIES
LAKE MATHEWS CHLORINATION FACILITY- REPLACE CHLORINATION EQPMT.
LAKE MATHEWS CNTRL TOWER-REPL. 45 30-INCH GATE/BUTTERFLY VALVES
LAKE MATHEWS CONTROL TOWER - REPLACE 45 10-INCH GATE VALVE
LAKE MATHEWS DAM SAFETY INSTRUMENTATION UPGRADES
LAKE MATHEWS DAM SPILLWAY ASSESSMENT
LAKE MATHEWS DIKE
LAKE MATHEWS DISCHARGE FACILITY UPGRADES
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 RELIABILITY
LAKE MATHEWS- ELECTRICAL SYSTEM IMPROVEMENT
LAKE MATHEWS- EMERGENCY GENERATOR
LAKE MATHEWS ENLARGEMENT (SPEC NO. 505)
LAKE MATHEWS FOREBAY LINING AND TOWER REPAIRS
LAKE MATHEWS FOREBAY OUTLET STRCTR-REPL.CONCRETE BLOCK BLDG
LAKE MATHEWS FOREBAY OUTLET, CONCRETE BLDG
LAKE MATHEWS FOREBAY PRESSURE CONTROL STRUCTURE AND BYPASS
LAKE MATHEWS FOREBAY- REPLACE FOOTBRIDGE
LAKE MATHEWS FOREBAY WALKWAY REPAIRS
LAKE MATHEWS FOREBAY, HEADWORK FACILITY AND EQUIPMENT UPGRADE
LAKE MATHEWS HEADWORKS-INSTALL AIR MTRS,3 HOWELL BNGR VALVE OP.
LAKE MATHEWS- HOUSE AND GARAGE
LAKE MATHEWS I/O TOWER EMERGENCY GENERATOR
LAKE MATHEWS- IMPROVE MAIN SUBSTATION
LAKE MATHEWS- IMPROVEMENT OF DOMESTIC WATER & FIRE PROT. SYSTEM
LAKE MATHEWS -LUMBER STORAGE BUILDING
LAKE MATHEWS -LUMBER STORAGE BUILDING - INTEREST
LAKE MATHEWS LUMBER STORAGE ROOF COVER
LAKE MATHEWS MAIN DAM AND SPILLWAY
LAKE MATHEWS MAIN DAM SUB DRAIN SYSTEM
LAKE MATHEWS MAINTENANCE BUILDING
LAKE MATHEWS MAINTN.FACILITIES-REPLACE 75 KVA TRANSFORMER.SERV.
LAKE MATHEWS- MODIFY CHLORINATION
LAKE MATHEWS- MODIFY CHLORINE STORAGE TANK FOUNDATIONS
LAKE MATHEWS- MODIFY ELECTRICAL SERVICE
LAKE MATHEWS MULTIPLE SPECIES RESERVE, MANAGER"S OFFICE AND RESIDENCE
LAKE MATHEWS OFFICE BLDG MODIFICATIONS-AMERICANS W/ DISABILITY
LAKE MATHEWS OFFICE TRAILER MODIFICATIONS-AMERICANS W/ DISABILITY
LAKE MATHEWS -OPERATOR RESIDENCE
LAKE MATHEWS OULET TOWER
LAKE MATHEWS OUTLET FACILITIES
LAKE MATHEWS OUTLET TOWER NO. 2 VALVE REHABILITATION
LAKE MATHEWS OUTLET TOWER- REPLACE CRANES
LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES
LAKE MATHEWS OUTLET TOWER-REPLACE GATE VALVES (RETIREMENT)
LAKE MATHEWS OUTLET TUNNEL
LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER
LAKE MATHEWS- PREFABRICATED AIRCRAFT HANGER - INTEREST
LAKE MATHEWS- PROPANE STORAGE TANK
LAKE MATHEWS- PROPANE STORAGE TANK - INTEREST
LAKE MATHEWS- REPLACE HOWELL-BUNGER VALVE OPERATORS
LAKE MATHEWS- REPLACE VALVES
LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE
LAKE MATHEWS RESERVOIR-RELOCATE SOUTHERLY SECURITY FENCE - INTEREST
LAKE MATHEWS- SEEPAGE ALARMS
LAKE MATHEWS- SEEPAGE ALARMS - INTEREST
LAKE MATHEWS SODIUM HYPOCHLORITE TANK REPLACEMENT
LAKE MATHEWS SODIUM HYPOCLORITE INJECTION SYSTEM
LAKE MATHEWS- SPRAY PAINT BOOTH
LAKE MATHEWS WASTEWATER SYSTEM REPLACEMENT
LAKE MATHEWS WATERSHED, DRAINAGE
LAKE MATHEWS WATERSHED, DRAINAGE WATER QUALITY MGMT PLAN (CAJALCO CREEK DAM)
LAKE MATHEWS, HAZEL ROAD
LAKE MATHEWS, REPLACE CHLORINATION EQUIPMENT
LAKE MATHEWS,DIKE #1- INSTALL PIEZOMETERS, STAS.55+00 & 85+50
LAKE MATHEWS: VALVES AND FITTINGS IN HEADWORKS
LAKE MATHEWS-CONST. CONCR.TRAFFIC BARR. WALL TO PROTECT HQ FACIL.
LAKE MATTHEWS FIRE WATER LINE
LAKE PERRIS POLLUTION PREVENTION AND SOURCE WATER PROTECTION (CAPITAL PORTION)
LAKE SKINNER - AERATION SYSTEM
LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN
LAKE SKINNER - CHLORINATION SYSTEM OUTLET TOWER BYPASS PPLN - INTEREST
LAKE SKINNER - INSTALL OUTLET CONDUIT FLOWMETER
LAKE SKINNER (AULD VALLEY RESERVOIR)- CLAIMS
LAKE SKINNER AERATOR AIR COMPRESSORS REPLACEMENT
LAKE SKINNER- EQUIPMENT YARD SECURITY
LAKE SKINNER- EQUIPMENT YARD SECURITY - INTEREST
LAKE SKINNER FACILITIES
LAKE SKINNER FACILITIES - EMPLOYEE HOUSING
LAKE SKINNER FACILITIES - FENCING
LAKE SKINNER FACILITIES - LANDSCAPING
LAKE SKINNER FACILITIES - RELOCATE BENTON ROAD
LAKE SKINNER OUTLET CONDUIT REPAIR
LAKE SKINNER OUTLET TOWER SEISMIC ASSESSMENT
LAKE SKINNER- PROPANE STORAGE TANK
LAKE SKINNER- PROPANE STORAGE TANK - INTEREST
LIVE OAK RESERVOIR & RESERVOIR BYPASS SCHEDULE 264A
LIVE OAK RESERVOIR REHABILITATION

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Storage Facilites

LIVE OAK RESERVOIR SURFACE REPAIR
MAINTENANCE FACILITIES, 75KVA TRANSFORMER SERVICE-LAKE MATHEWS (ORG CONST)
MILLS FINISHED WATER RESERVOIR REHABILITATION
MINOR CAPITAL PROJECTS FOR FY 1989/90 - LAKE MATHEWS
MINOR CAPITAL PROJECTS FOR FY 1989/90 - PALOS VERDES RESERVOIR
MINOR CAPITAL PROJECTS-LAKE SKINNER, INLET CANAL ELECTRIC FISH BARRIER
MINOR CAPITAL PROJECTS-LIVE OAK RESERVOIR, DESILT BASIN IMPROVEMENTS
MODIFICATION OF THE LAKE MATHEWS SERVICE WATER SYSTEM
MORRIS DAM COTTAGE
MORRIS DAM- ENLARGMT. OF SPILLWAY FACLT.& UPPER FDR.VALVE MODF
MORRIS DAM ROAD IMPROVEMENT
MORRIS DAM, SEISMIC STABILITY REANALYSIS
MORRIS DAM-REPLACE 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 COVER AND LINER REPLACEMENT
PALOS VERDES RESERVOIR COVER REPLACEMENT
PALOS VERDES RESERVOIR- FENCING AROUND
PALOS VERDES RESERVOIR- REPLACE DOMESTIC WATER SYSTEM PIPING
PALOS VERDES RESERVOIR SODIUM HYPOCHLORITE FEED SYSTEM UPGRADE
PALOS VERDES RESERVOIR,BYPASS PIPELINE RELIEF STRUCTURE MODIFN.
PALOS VERDES RESERVOIR,COVERING
PALOS VERDES RESERVOIR,REPLACE ACCESS AND PERIMETER ROADS
PALOS VERDES RESERVOIR: INCREASING ELEVATION OF SPILLWAY CREST
PALOS VERDES RESERVOIR-INSTALL VALVE & CHLORINATION NOZZLE,INL.TWR
PALOS VERDES RESERVOIR-REPLACE CHLORINATION SYSTEM
PAMO RESERVOIR- WATER STORAGE FEASIBIILITY STUDY
PAMO RESERVOIR- WATER STORAGE FEASIBIILITY STUDY- INTEREST
PV RESERVOIR GROUNDWATER MANAGEMENT
PVR FACILITY SEWER CONNECTION
RECORD DRAWING RESTORATION PROGRAM, CRA
REPAIRS TO AZUSA CONDUIT
REPLACEMENT OF A 30 INCH GATE VALVE P.V.R.
RESIDENCE # 95-D, ORANGE COUNTY RESERVOIR
RESIDENCE 45-D - CORONA DEL MAR RESERVOIR
RESIDENCE 80-D - ORANGE COUNTY RESERVOIR
RESIDENCE 90-D - LAKE MATHEW
RESIDENCE 91-D - SAN JACINTO RESERVOIR
RESIDENCE 93-D - SAN JACINTO RESERVOIR
ROADS AT LAKE MATHEWS ABOVE FLOODLINE
SAN DIEGO ACQUEDUCT: COTTAGE AT SAN JACINTO RESERVOIR
SAN JACINTO RESERVOIR - SAN DIEGO AQUEDUCT
SECOND OUTLET, PALOS VERDES RESERVOIR (SPEC NO. 597)
SEEPAGE CONTROL AT LAKE MATHEWS
SKINNER DAM SAFETY INSTRUMENTATION UPGRADES
SKINNER DAM SPILLWAY ASSESSMENT
SKINNER FINISHED WATER RESERVOIR SLIDE GATES REHABILITATION
TEMPORARY EMPLOYEE LABOR SETTLEMENT
VALVE - GENE RESERVOIR (REPLACED 201)
VALVE STRUCTURE MODIFICATIONS-UPPER FDR, SAN GABRIEL CROSSING (INTERIM CONST)
WADSWORTH PUMP PLANT CONDUIT PROTECTION
WADSWORTH PUMP PLANT, PUMP MOTOR CONVERSION
WADSWORTH PUMPING PLANT FIRE PROTECTION SYSTEM UPGRADES
WADSWORTH/DVL CONTROL & PROTECTION SYSTEM UPGRADE - CONSTRUCTION & STARTUP
WATER QUALITY PROJECT UPSTREAM
WATER SUPPLY SYSTEM, OPERATING TOWER, LAKE MATHEWS
WEYMOUTH FINISHED WATER RESERVOIR GATE REPLACEMENT

Sub-total Storage facilities costs ***99,537,336***

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Conveyance and Aqueduct Facilites

2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - GENE
2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - INTAKE
2.4 KV STANDBY DIESEL ENGINE GENERATOR REPLACEMENT - IRON
ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT
ALL PUMPING PLANTS - 230 KV & 69 KV DISCONNECTS REPLACEMENT
ALL PUMPING PLANTS - BRIDGE CRANES
ALL PUMPING PLANTS - TRANSFORMER BANK BRIDGE
ALLEN MCCOLLOCH PIPELINE - CORROSION INTERFERENCE MITIGATION
ALLEN MCCOLLOCH PIPELINE - RIGHT OF WAY
ALLEN MCCOLLOCH PIPELINE - UPDATE / MODIFY ALL BOYLE ENGINEERING DRAWINGS
AMP VALVE & SERVICE CONNECTION VAULT REPAIR
AQUEDUCT & PUMPING PLANT ISOLATION / ACCESS FIXTURES - STUDY
AQUEDUCT & PUMPING PLANT ISOLATION GATES
ARROWHEAD EAST TUNNEL CONSTRUCTION
ARROWHEAD TDS REDUCTION
ARROWHEAD TUNNELS CLAIMS COST
ARROWHEAD TUNNELS CONNECTOR ROAD
ARROWHEAD TUNNELS CONSTRUCTION
ARROWHEAD TUNNELS ENGINEERING
ARROWHEAD TUNNELS RE-DESIGN
ARROWHEAD WEST TUNNEL CONSTRUCTION
AULD VALLEY CONTROL STRUCTURE AREA FACILITIES UPGRADE STUDY
AUXILIARY POWER SYSTEM REHABILITATION / UPGRADES STUDY
AUXILIARY POWER SYSTEM REHABILITATION/UPGRADES
BACHELOR MOUNTAIN COMMUNICATION SITE ACQUISITION
BACHELOR MOUNTAIN TELECOM SITE IMPROVEMENTS
BANK TRANSFORMERS REPLACEMENT STUDY
BLACK METAL MOUNTAIN - COMMUNICATIONS FACILITY UPGRADE
BLACK METAL MOUNTAIN 2.4kV ELECTRICAL POWER UPGRADE
BOX SPRINGS FEEDER REHAB PHASE III
BUDGET ADJUSTMENT
CABAZON RADIAL GATE FACILITY IMPROVEMENTS
CAJALCO CREEK MITIGATION FLOWS
CAST-IRON BLOW OFF REPLACEMENT - PHASE 4
CATHODIC PROTECTION STUDY - DESIGN AND CONSTRUCTION
CCRP - BLOW-OFF VALVES PHASE 4 PROJECT
CCRP - CONTINGENCY
CCRP - EMERGENCY REPAIR
CCRP - HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB.
CCRP - PART 1 & 2
CCRP - SAND TRAP CLEANING EQUIPMENT & TRAVELING CRANE STUDY
CCRP - TRANSITION & MAN-WAY ACCESS COVER REPLACEMENT - STUDY & DESIGN
CCRP - TUNNELS STUDY
CEPSRP - 230 KV SYSTEM SYNCHRONIZERS
CEPSRP - ALL PUMPING PLANTS - CONTINGENCY & OTHER CREDITS
CEPSRP - ALL PUMPING PLANTS - REPLACE 6.9 KV TRANSFORMER BUSHINGS
CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV , 69 KV & 6.9 KV LIGHTENING ARRESTERS
CEPSRP - ALL PUMPING PLANTS - REPLACE 230KV TRANSFORMER PROTECTION
CEPSRP - SWITCHYARDS & HEAD GATES REHABILITATION
CEPSRP- ALL PUMPING PLANTS - IRON MOUNTAIN - 230KV BREAKER SWITCH. INST.
COLORADO RIVER AQUEDUCT - PUMPING
COLORADO RIVER AQUEDUCT - SIPHONS AND RESERVOIR OUTLETS REFURBISHMENT
COLORADO RIVER AQUEDUCT CONVEYANCE RELIABILITY, PHASE II REPAIRS AND INSTRUMENTATION
CONTROL SYSTEM DRAWING UPGRADE STUDY (PHASE 1) - STUDY
COPPER BASIN AND GENE DAM OUTLET WORKS REHABILITATION (STUDY & DESIGN)
COPPER BASIN AND GENE WASH RESERVOIRS DISCHARGE VALVE REHABILITATION
COPPER BASIN INTERIM CHLORINATION SYSTEM
COPPER BASIN OUTLET GATES RELIABILITY
COPPER BASIN OUTLET REHABILITATION
COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH DAM SLUICEWAYS REHABILITATION
COPPER BASIN POWER & PHONE LINES REPLACEMENT
COPPER BASIN RESERVOIR OUTLET STRUCTURE REHABILITATION PROJECT
COPPER BASIN RESERVOIRS DISCHARGE VALVE REHABILITATION & METER REPLACEMENT
COPPER SULFATE STORAGE AT LAKE SKINNER AND LAKE MATHEWS
CORROSION CONTROL OZONE MATERIAL TEST FACILITY
COST OF LAND AND RIGHT OF WAY
CRA - ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVER REPLACEMENT
CRA - AQUEDUCT AND PUMPING PLANT ISOLATION GATES
CRA - AQUEDUCT RESERVOIR AND DISCHARGE LINE ISOLATION GATES
CRA - AUXILIARY POWER SYSTEM REHAB
CRA - BANK TRANSFORMERS REPLACEMENT STUDY
CRA - BLOW-OFF VALVES PHASE 4
CRA - CIRCULATING WATER SYSTEM STRAINER REPLACEMENT
CRA - CONTROL SYSTEM IMPLEMENTATION PHASE CLOSE OUT
CRA - CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2
CRA - COPPER BASIN OUTLET, AND COPPER BASIN & GENE WASH SLUICEWAYS REHABILITATION
CRA - COPPER BASIN POWER & PHONE LINES REPLACEMENT
CRA - CUT & COVER FORNAT WASH EXPOSURE STUDY
CRA - DANBYTOWER FOOTER REPLACEMENT
CRA - DELIVERY LINE NO. 1 SUPPORTS REHAB - FIVE PUMPING PLANTS
CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - GENE & INTAKE
CRA - DELIVERY LINES 2&3 SUPPORTS REHAB - IRON, EAGLE, & HINDS
CRA - DESERT PUMP PLANT OIL CONTAINMENT
CRA - DESERT SEWER SYSTEM REHABILITATION PROJECT
CRA - DESERT WATER TANK ACCESS & SAFETY IMPROVEMENTS
CRA - DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION
CRA - DISCHARGE LINE ISOLATION GATES
CRA - DWCV-4 VALVE REPLACEMENT
CRA - EAGLE MOUNTAIN SAND TRAPS INFLOW STUDY

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Conveyance and Aqueduct Facilites

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 MOUNTAIN RESERVOIR AND CANAL LINER REPAIRS
CRA - IRON MTN. TUNNEL REHABILITATION
CRA - LAKEVIEW SIPHON FIRST BARREL - REPAIR DETERIORATED JOINTS
CRA - MAIN PUMP MOTOR EXCITERS
CRA - MAIN PUMP STUDY
CRA - MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY
CRA - PUMPING PLANT RELIABILITY PROGRAM CONTINGENCY
CRA - PUMPING PLANTS VULNERABILITY ASSESSMENT
CRA - PUMPING WELL CONVERSION
CRA - QUAGGA MUSSEL BARRIERS
CRA - REAL PROPERTY - BOUNDARY SURVEYS
CRA - RELIABILITY PROGRAM 230 KV & 69 KV DISCONNECTS REPLACEMENT STUDY (5 PLANTS)
CRA - RELIABILITY PROGRAM INVESTIGATION
CRA - RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568
CRA - RELIABILTY PHASE II CONTINGENCY
CRA - SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE
CRA - SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION
CRA - SERVICE CONNECTION DWCV-4 A, B, C, & D PLUG VALVES REPLACEMENT
CRA - SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS
CRA - SUCTION & DISCHARGE LINES EXPANSION JOINT REHAB
CRA - SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM
CRA - SWITCHYARDS AND HEAD GATES REHAB
CRA - SWITCHYARDS AND HEAD GATES REHABILITATION
CRA - TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT
CRA - TUNNELS VULNERABILITY STUDY - REPAIRS TO TUNNELS
CRA - WEST PORTAL UPGRADE - REHAB OF STILLING WELL, SLIDE GATE OPERATORS AND RADIAL GATES
CRA 2.4 KV STANDBY DIESEL ENGINE GENERATORS REPLACEMENT
CRA 230 KV & 69 KV DISCONNECTS SWITCH REPLACEMENT
CRA 230 KV SYSTEM INTER-AGENCY OPERABILITY UPGRADES
CRA 230 KV TRANSMISSION SYSTEM REGULATORY AND OPERATIONAL FLEXIBILITY UPGRADES
CRA 230KV & 69KV PROTECTION PANEL UPGRADE
CRA 230kV TRANSMISSION SYSTEM REGULATORY COMPLIANCE AND OPERATIONAL FLEXIBILITY UPGRADES
CRA 6.9 KV LEAD JACKETED CABLES
CRA 6.9 KV POWER CABLES REPLACEMENT
CRA 69KV PANEL UPGRADE
CRA ACCESS STRUCTURE, TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT
CRA ALL PUMPING PLANTS - FLOW METER UPGRADES
CRA AND IRON MOUNTAIN RESERVOIR PANEL REPLACEMENT
CRA AQUEDUCT BLOCKER GATE REPLACEMENT
CRA AQUEDUCT ISOLATION GATES REPLACEMENT
CRA AUXILIARY POWER SYSTEM REHABILITATION/UPGRADES FOR FOUR PUMPING PLANTS
CRA BLACK METAL COMMUNICATION SITE II UPGRADE
CRA CANAL CRACK REHAB AND EVALUATION
CRA CANAL CRACK REHABILITATION
CRA CANAL IMPROVEMENTS
CRA CIRCULATING WATER SYSTEM STRAINER REPLACEMENT
CRA CONDUIT FORMAT WASH EROSION REPAIRS
CRA CONDUIT STRUCTRUAL PROTECTION
CRA CONVEYANCE RELIABILITY PROGRAM (CCRP) - BLOW-OFF REPAIR
CRA CONVEYANCE RELIABILITY PROGRAM PART 1 & PART 2
CRA COPPER BASIN AND GENE WASH DAM SLUICEWAYS
CRA COPPER BASIN OUTLET GATES RELIABILITY STUDY
CRA DELIVERY LINE REHABILITATION
CRA DESERT AIRFIELDS IMPROVEMENT
CRA DESERT REGION SECURITY IMPROVEMENTS
CRA DISCHARGE CONTAINMENT PROGRAM - CONTINGENCY
CRA DISCHARGE CONTAINMENT PROGRAM - GENE & IRON DRAIN SYSTEMS
CRA DISCHARGE CONTAINMENT PROGRAM - INVESTIGATION
CRA DISCHARGE CONTAINMENT PROGRAM - OIL & CHEMICAL UNLOADING PAD CONTAINMENT
CRA ELECTRICAL / POWER SYSTEM RELIABILITY PROGRAM (CEPSRP)
CRA ENERGY EFFICIENCY IMPROVEMENTS
CRA GENE PUMPING PLANT HEAVY EQUIPMENT SERVICE PIT
CRA GENE STORAGE WAREHOUSE REPLACEMENT
CRA HINDS PUMPING PLANT - WASH AREA UPGRADE
CRA INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT
CRA IRON GARAGE HEAVY EQUIPMENT SERVICE PIT REPLACEMENT
CRA IRON HOUSING REPLACEMENT
CRA IRON MOUNTAIN SUCTION JOINT REFURBISHMENT PILOT
CRA MAIN PUMP & MOTOR REFURISHMENT
CRA MAIN PUMP AND MOTOR REFURISHMENT
CRA MAIN PUMP CONTROLS & INSTRUMENTATION
CRA MAIN PUMP DISCHARGE VALVE REFURBISHMENT
CRA MAIN PUMP MOTOR EXCITERS ASSESSMENT
CRA MAIN PUMP MOTOR EXCITERS REHABILITATION
CRA MAIN PUMP REHABILITATION
CRA MAIN PUMP STUDY
CRA MAIN PUMP SUCTION AND DISCHARGE LINES, EXPANSION JOINT REPAIRS
CRA MAIN PUMPING PLANT DISCHARGE LINE ISOLATION BULKHEAD COUPLING CONSTRUCTION
CRA MAIN PUMPING PLANT UNIT COOLERS & HEAT ESCHANGERS
CRA MAIN PUMPING PLANTS DISCHARGE LINE ISOLATION BULHEAD COUPLINGS
CRA MAIN PUMPING PLANTS LUBRICATION SYSTEM
CRA MAIN PUMPING PLANTS SERVICE WATER & SAND REMOVAL SYSTEM
CRA MAIN TRANSFORMER REFURBISHMENT
CRA MAIN TRANSFORMER REPLACEMENT /REHABILITATION
CRA MAIN TRANSFORMER REPLACEMENT/REHAB.
CRA MILE 12 POWER LINE & FLOW MONITORING EQUIP. STUDY
CRA OVER-CURRENT RELAY REPLACEMENT

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Conveyance and Aqueduct Facilites

CRA PROTECTIVE SLABS
CRA PUMP PLANT FLOW METER REPLACEMENT
CRA PUMP PLANT FLOW METER UPGRADE
CRA PUMP PLANT SUMP PIPING REPLACEMENT STUDY
CRA PUMP PLANT SUMP SYSTEM REHABILITATION
CRA PUMP PLANT UNINTERRUPTABLE POWER STUDY (UPS) UPGRADE
CRA PUMP PLANTS 2.3KV AND 480V SWITCH RACK REHABILITATION
CRA PUMP PLANTS 2300KV & 480 V SWITCHRACK REHAB
CRA PUMP WELLS CONVERSION AND BLOW-OFF REPAIR
CRA PUMPING PLANT DELIVERY LINE REHABILITATION
CRA PUMPING PLANT REHABILITATION STUDY
CRA PUMPING PLANT REHABILITATION STUDY AND INVESTIGATION
CRA PUMPING PLANT RELIABILITY PROGRAM - HIGH PRESSURE COMPRESSOR REPLACEMENT
CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY
CRA PUMPING PLANT RELIABILITY PROGRAM - SUCTION AND DISCHARGE LINES-EXPANSION JOINT REPAIRS
CRA PUMPING PLANT STORAGE BUILDINGS AT HINDS, EAGLE MOUNTAIN AND IRON MOUNTAIN
CRA PUMPING PLANT SUMP SYSTEM REHABILITATION
CRA PUMPING PLANT WASTEWATER SYSTEM - GENE & IRON MTN.
CRA PUMPING PLANT WASTEWATER SYSTEM - INTAKE
CRA PUMPING PLANT WASTEWATER SYSTEM REHABILITATION - ALL FIVE PUMPING PLANT PRELIMINARY DESIGN
CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT - GENE/IRON MTN FINAL DESIGN
CRA PUMPING PLANT WASTEWATER SYSTEM REPLACEMENT - HINDS & EAGLE MTN.
CRA PUMPING PLANTS - AUXILIARY POWER SYSTEM REHABILITATE/UPGRADES
CRA PUMPING PLANTS 230KV & 69K DISCONNECT SWITCH REPLACEMENT
CRA PUMPING PLANTS ASPHALT REPLACEMENT
CRA PUMPING PLANTS CRANE IMPROVEMENTS
CRA PUMPING PLANTS SWITCH HOUSE FAULT CURRENT PROTECTION
CRA PUMPING PLANTS VULNERABILITY ASSESSMENT
CRA PUMPING PLANTS WATER TREATMENT SYSTEMS REPLACEMENT
CRA PUMPING PLT RELIABILITY PROGRAM, DISCHARGE LINE COUPLING INSTALLATION
CRA PUMPING WELL CONVERSION
CRA QUAGGA MUSSEL BARRIERS
CRA RADIAL GATES AND SLIDE GATE REHABILITATION
CRA RADIAL GATES REPLACEMENT
CRA RELIABILITY PHASE II - PUMPING PLANTS 230KV & 69KV DISCONNECT SWITCH REPLACEMENT
CRA RELIABILITY PROGRAM - DISCHARGE VALVE LUBRICATORS
CRA RELIABILITY PROGRAM - MOTOR BREAKER FAULTY CURRENT STUDY (5 PLANTS)
CRA RELIABILITY PROGRAM PHASE 6 (AQUEDUCT PHASE 6 REHAB.) - SPEC 1568
CRA RELIABILTY PHASE II - PUMPING PLANT SWITCH HOUSE FAULT CURRENT PROTECTION
CRA SAND TRAP EQUIPMENT UPGRADES
CRA SEISMIC EVALUATION - SWITCH HOUSE AND PUMP ANCHORAGE
CRA SEISMIC RETROFIT OF 6.9kV SWITCH HOUSES
CRA SEISMIC UPGRADE OF 6.9KV SWITCH HOUSES
CRA SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STRUCTURE CONSTRUCTION
CRA SERVICE CONNECTION DWCV-4 VALVES REPLACEMENT
CRA SIPHON REHAB
CRA SIPHONS, TRANSITIONS, CANALS, AND TUNNELS REHABILITATION AND IMPROVEMENTS
CRA SURGE CHAMBER DISCHARGE LINE BY-PASS COVERS
CRA SWITCHRACKS & ANCILLARY STRUCTURES EROSION CONTROL
CRA TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT
CRA TRANSITION STRUCTURE AND MANHOLE COVERS REPLACEMENT
CRA UPS REPLACEMENT
CRA VILLAGES DOMESTIC WATER MAIN DISTRIBUTION REPLACEMENT STUDY
CRA WATER DISTRIBUTION SYSTEM & VILLAGE ASPHALT REPLACEMENT - GENE & IRON MOUNTAIN
CRA WATER DISTRIBUTION SYSTEM REPLACEMENT AND CRA ROADWAY ASPHALT REPLACEMENT - ALL PP
CUF DECHLORINATION SYSTEM
DAM SLUICEWAYS AND OUTLETS REHABILITATION
DANBY TOWER FOOTER REPLACEMENT
DANBY TOWERS FOUNDATION REHABILITATION
DESERT FACILITIES FIRE PROTECTION SYSTEMS UPGRADE
DESERT LAND ACQUISITIONS
DESERT PUMP PLANT OIL CONTAINMENT
DESERT ROADWAY IMPROVEMENT
DESERT SEPTIC SYSTEM
DESERT SEWER SYSTEM REHABILITATION
DESERT WATER TANK ACCESS - FIRE WATER, CIRCULATING WATER, DOMESTIC WATER- STUDY
DISCHARGE LINE ISOLATION BULKHEAD COUPLINGS
DISTRIBUTION SYSTEM FACILITIES - REHABILITATION PROGRAM
DISTRIBUTION SYSTEM FACILITIES REHABILITATION PROGRAM - MAINTENANCE & STORAGE SHOP (PC-1)
DISTRIBUTION SYSTEM RELIABILITY PROGRAM - PHASE 2
DVL INLET / OUTLET TOWER FISH SCREENS REPLACEMENT
DVL TO SKINNER TRANSMISSION LINE STUDY
E. THORNTON IBBETSON GUEST QUARTERS
EAGLE AND HINDS EQUIPMENT WASH AREA UPGRADE
EAGLE KITCHEN UPGRADE
EAGLE MOUNTAIN PUMPING PLANT SCADA SYSTEM
EAGLE MOUNTAIN SAND TRAPS STUDY
EAGLE MOUNTAIN SIPHONS SEISMIC VULNERABILITY STUDY
EAGLE MTN SAND TRAPS STUDY
EAGLE ROCK ASPHALT REPAIR PROJECT
EAGLE ROCK MAIN ROOF REPLACEMENT
ENHANCED VAPOR RECOVERY UPGRADES FOR GASOLINE DISPENSERS
ENVIRONMENTAL MITIGATION
ETIWANDA PIPELINE LINER REPAIR
ETIWANDA RESERVOIR LINER REPAIR
FUTURE SYSTEM RELIABILITY PROJECTS
GARVEY RESERVOIR - AUTOMATED DATA ACQUISITION SYSTEM
GARVEY RESEVOIR AUTOMATED DATA ACQUISITON SYSTEM REPLACEMENT
GENE & INTAKE P.P. - FREQUENCY PROTECTION RELAY REPLACEMENT
GENE & INTAKE PUMPING PLANT SURGE CHAMBER OUTLET GATES RE-COATING
GENE & INTAKE PUMPING PLANTS - REPLACE UNDER FREQUENCY PROTECTION RELAY
GENE AIR CONDITION
GENE CAMP STATION SERVICE TRANSFORMER REPLACEMENT
GENE PUMPING PLANT - AIR STRIP EXTENSION PROJECT
GENE PUMPING PLANT - HEAVY EQUIPMENT SERVICE PIT

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Conveyance and Aqueduct Facilites

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
GENE WASH RESERVOIRS DISCHARGE VALVE REHABILITATION
HEADGATE OPERATORS & CIRCUIT BREAKERS REHAB.
HIGHLAND PIPELINE CONSTRUCTION
HINDS EAGLE & IRON MOUNTAINS STORAGE BUILDINGS
HINDS PUMPING PLANT DISCHARGE VALVE PIT PLATFORM REPLACEMENT
HINDS PUMPING PLANT EQUIPMENT WASH AREA UPGRADES
HINDS PUMPING PLANT SCADA SYSTEM
HINDS PUMPING PLANT STANDBY GENERATOR REPLACEMENT
INLAND FDR, ARROWHEAD TUNNELS REDESIGN
INLAND FDR, ARROWHEAD WEST TUNNEL CONSTRUCTION
INLAND FDR, CONTRACT 9, CONSTRUCTION OF RIVERSIDE PPLN SOUTH
INLAND FDR, OWNER CONTROLLED INSURANCE PROGRAM
INLAND FDR, REACH 4, RUSD PPLN
INLAND FDR-CNTR #1/DEVIL CYN-WATERMAN RD
INLAND FDR-CNTR #4-SOFT GRND TNL/SANTA ANA
INLAND FDR-CONT #8-PIPEL PARALLEL TO DAVIS RD
INLAND FDR-ENVIRON. MITIG.
INLAND FEEDER - RIGHT OF WAY AND EASEMENT PROCUREMENT
INLAND FEEDER CONTINGENCY
INLAND FEEDER COST OF LAND AND RIGHT OF WAY
INLAND FEEDER ENVIRONMENTAL MITIGATION
INLAND FEEDER GROUNDWATER MONITORING
INLAND FEEDER HIGHLAND PIPELINE CLAIMS COST
INLAND FEEDER HIGHLAND PIPELINE CONSTRUCTION
INLAND FEEDER HIGHLAND PIPELINE DESIGN
INLAND FEEDER MENTONE PIPELINE CONSTRUCTION
INLAND FEEDER MENTONE PIPELINE DESIGN
INLAND FEEDER MENTONE PIPELINE RUSD CONSTRUCTION
INLAND FEEDER OWNER CONTROLLED INSURANCE PROGRAM
INLAND FEEDER PROGRAM REMAINING BUDGET/CONTINGENCY
INLAND FEEDER PROJECT MANAGEMENT SUPPORT
INLAND FEEDER PURCHASE OF LAND AND RIGHT OF WAY
INLAND FEEDER RAISE BURIED STRUCTURES AND REALIGN DAVIS RD.
INLAND FEEDER REVERSE OSMOSIS PLANT
INLAND FEEDER RIVERSIDE BADLANDS TUNNEL CONSTRUCTION
INLAND FEEDER RIVERSIDE NORTH PIPELINE DESIGN
INLAND FEEDER RUSD CLAIMS DEFENSE
INLAND FEEDER STUDIES
INLAND FEEDER UNDERGROUND STORAGE TANK REMOVAL & ABOVEGROUND STORAGE TANK INSTALLATION
INLAND FEEDER, ARROWHEAD EAST TUNNEL
INLAND FEEDER, ARROWHEAD TUNNELS CONSTRUCTION
INLAND FEEDER, CONTRACT #5, OPAL AVENUE PORTAL / BADLANDS TUNNEL
INLAND FEEDER, CONTRACT #7, RIVERSIDE NORTH PIPELINE CONSTRUCTION
INLAND FEEDER, PROGRAM MANAGEMENT
INLAND FEEDER/SBMWD HIGHLAND INTERTIE BYPASS LINE REHAB
INSULATION JOINT TEST STATIONS
INTAKE POWER AND COMMUNICATION LINE RELOCATION
INTAKE POWER AND COMMUNICATIONS LINE RELOCATION
INTAKE PPLANT - POWER & COMMUNICATION LINE REPLACEMENT
INTAKE PUMPING PLANT - COOLING AND REJECT WATER DISCHARGE TO LAKE HAVASU
INTAKE PUMPING PLANT AUTOMATION PROGRAMMING
INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT
INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION
INTAKE PUMPING PLANT INSTRUMENTATION REPLACEMENT & AUTOMATION (4 PLANTS)
INTAKE PUMPING PLANT POWER & COMMUNICATION LINE REPLACEMENT
INTAKE PUMPING PLANT SCADA SYSTEM
INTAKE PUMPING PLANT STANDBY GENERATOR REPLACEMENT
IRON MOUNTAIN & EAGLE MOUNTAIN 230KV TRANSMISSION LINE PILOT RELAY
IRON MOUNTAIN AUXILIARY POWER SYSTEM REHABILITATION
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
IRON MOUNTAN & EAGLE MOUNTAIN 230kV TRANSMISSION LINE PILOT RELAY
JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE 2 REPAIRS
JULIAN HINDS PUMPING PLANT DELIVERY PIPE EXPANSION JOINT PHASE I REPAIR
LAKE MATHEWS FOREBAY & HEADWORK FACILITY & EQUIPMENT
LAKE MATHEWS FOREBAY WALKWAY REPAIRS
LAKE MATHEWS ICS
LAKE MATHEWS INTERIM CHLORINATION SYSTEM
LAKE SKINNER - OUTLET CONDUIT FLOWMETER INSTALLATION
LAKE SKINNER BYPASS PIPELINE NO. 2 CATHODIC PROTECTION
LAKE SKINNER OUTLET CONDUIT
LAKEVIEW PIPELINE LEAK REPAIR AT STA. 2510+49
LAVERNE FACILITIES - EMERGENCY GENERATOR
LAVERNE FACILITIES - MATERIAL TESTING
LOWER FEEDER EROSION PROTECTION
MAGAZINE CANYON - VALVE REPLACEMENT FOR SAN FERNADO TUNNEL (STATION 778+80)
MAGAZINE CANYON OIL & WATER SEPARATOR
MAGAZINE CANYON OIL/WATER SEPARATOR
MAPES LAND ACQUISTION
MENTONE PPLN, RUSD, DEFENSE OF CLAIM
MILE 12 FLOW AND CHLORINE MONITORING STATION UPGRADES
MILE 12 POWER LINE & FLOW MONITORING EQUIPMENT STUDY
MILLS PLANT SUPPLY PUMP STATION STUDY
MINOR CAP FY 2011/12
MOTOR BREAKER FAULTY (5 PPLANTS)

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description	
Conveyance and Aqueduct Facilites	
NEWHALL TUNNEL - REPAIR STEEL LINER	
NEWHALL TUNNEL - UPGRADE LINER SYSTEM	
NITROGEN STORAGE STUDY AT DVL, INLAND FEEDER PC-1, AND LAKE MATHEWS	
OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REPAIR	
OC 88 PUMP PLANT FIRE PROTECTION STUDY	
OC-71 SERVICE CONNECTION REPAIRS	
OLINDA PCS FACILITY REHABILITATION AND UPGRADE	
OLINDA PRESSURE CONTROL STRUCTURE FACILITY REHABILITATION AND UPGRADE	
ORANGE COUNTY 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REPAIR	
ORANGE COUNTY 88 PUMP PLANT FIRE PROTECTION STUDY	
OWNER CONTROLLED INSURANCE PROGRAM	
PALO VERDE VALLEY LAND PURCHASE - 16,000 ACRES	
PALOS VERDES FEEDER REHABILITATION OF DOMINGUEZ CHANNEL	
PALOS VERDES RESERVOIR SPILLWAY MODIFICATION	
PROJECT MANAGEMENT SUPPORT	
PUDDINGSTONE RADIAL GATE REHABILITATION	
PURCHASE OF LAND AND RIGHT OF WAY	
QUAGGA MUSSEL STUDY	
R&R FOR CRA	
REPAIR UPPER FEEDER LEAKING EXPANDSION JOINT	
REPAIRS TO TUNNELS	
RIALTO FEEDER REPAIR @ STA. 3662+23	
RIALTO FEEDER REPAIR OF ANOMALOUS PIPE SECTION	
RIVERSIDE BADLANDS TUNNEL CONSTRUCTION	
RIVERSIDE BRANCH - ALESSANDRO BLVD. LEFT LAND TURN LANE	
RIVERSIDE BRANCH - CONSTRUCTION OF CONTROL PANEL DISPLAY WALL	
RIVERSIDE NORTH PIPELINE DESIGN & CONSTRUCTION	
RIVERSIDE SOUTH PIPELINE CONSTRUCTION	
SAN DIEGO PIPELINE REPAIR AT STATION 1268+57	
SAN FERNANDO TUNNEL STATION 778+80 VALVE REPLACEMENT	
SAN GABRIEL TOWER SEISMIC ASSESSMENT	
SAN GABRIEL TOWER SLIDE GATE REHABILITATION	
SAN JACINTO TUNNEL EAST ADIT REHABILITATION	
SAN JACINTO TUNNEL, WEST PORTAL	
SAN JOAQUIN RESERVOIR - NEW DESIGN	
SAN JOAQUIN RESERVOIR IMPROVEMENT- FLOATING COVER	
SAN JOAQUIN RESERVOIR IMPROVEMENTS	
SAN JOAQUIN RESERVOIR IMPROVEMENTS STUDY	
SAND TRAP CLEANING EQUIPMENT AND TRAVELING CRANE STUDY	
SANTA ANA RIVER BRIGDE SEISMIC RETROFIT	
SANTIAGO TOWER ACCESS ROAD UPGRADE	
SANTIAGO TOWER PATROL ROAD REPAIR	
SD5 REPAIR	
SECOND LOWER FEEDER STRAY CURRENT MITIGATION SYSTEMS REFURBISHMENT	
SECURITY FENCING AT OC-88 PUMPING PLANT	
SEISMIC EVALUATION OF CRA STRUCTURES	
SEISMIC PROGRAM	
SEISMIC UPGRADE OF 11 FACILITIES OF THE CONVEYANCE & DISTRIBUTION SYSTEM	
SEPULVEDA FEEDER CORROSION INTERFERENCE MITIGATION	
SEPULVEDA FEEDER REPAIR AT STATION 1099	
SEPULVEDA FEEDER STRAY CURRENT MITIGATION SYSTEM REFURBISHMENT	
SERVICE CONNECTION & EOCF #2 METER ACCESS ROAD UPGRADE & BETTERMENT	
SERVICE CONNECTION DWCV-2T VALVES REPLACEMENT AND STUCTURE CONSTRUCTION	
SKINNER BR - IMPROVE CABAZON RADIAL GATE FACILITY	
SUCTION & DISCHARGE LINES EXPANSION JOINT STUDY	
SWITCHYARDS AND HEAD GATES REHAB	
TEMESCAL HYDRO-ELECTRIC PLANT ACCESS ROAD UPGRADE	
TEMESCAL POWER PLANT ACCESS ROAD PAVING	
TRANSFORMER OIL & CHEMICAL UNLOADING PAD CONTAINMENT	
TRANSFORMER OIL AND SODIUM HYPOCHLORITE CONTAINMENT PROJECT	
U.S. BUREAU OF LAND MANAGEMENT LAND ACQUISITION	
UPPER FEEDER CATHODIC PROTECTION SYSTEM	
UPPER FEEDER GATES REHABILITATION PROJECTS	
UPPER FEEDER LEAKING EXPANDSION JOINT REPAIR	
VALLEY BRANCH - PIPELINE CORROSION TEST STATION	
WASTEWATER SYSTEM REHABILITATION	
WASTEWATER SYSTEM REHABILITATION - GENE/IRON MTN	
WASTEWATER SYSTEM REHABILITATION - HINDS/EAGLE MTN	
WEST VALLEY FEEDER #2 CATHODIC PROTECTION SYSTEM REHABILITATION	
WHITE WATER SIPHON PROTECTION	
WHITEWATER EROSION PROTECTION STRUCTURE REHABILITATION	
WHITEWATER SIPHON EROSION PROTECTION	
WHITEWATER SIPHON PROTECTION STRUCTURE	
Sub-total Conveyance and Aqueduct facilities costs	***$ 76,253,010***

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Distribution Facilites

108TH STREET PRESSURE CONTROL STRUCTURE VALVE REPLACEMENT
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 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 OC-76 TURNOUT RELOCATION
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
APPIAN WAY VALVE REPLACEMENT
ARROW HIGHWAY PROPERTY DEVELOPMENT
ASPHALT REHABILITATION AT WEYMOUTH FINISHED WATER RESERVOIR
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
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
CARBON CREEK PRESSURE CONTROL STRUCTURE SEISMIC ASSESSMENT
CARBON CREEK PRESSURE CONTROL STRUCTURE SEISMIC RETROFIT
CASA LOMA AND SAN DIEGO CANAL LINING STUDY - PART 2
CASA LOMA SIPHON BARREL 1 & 2 DVL AND SD CANAL FLOW METER REPLACEMENT
CASA LOMA SIPHON BARREL NO. 1 - PERMANENT REPAIRS
CASA LOMA SIPHON BARREL NO. 1 JOINT REPAIR
CASA LOMA SIPHON NO 1, CASA LOMA CANAL & SAN DIEGO 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 AVENUE VALVE REPLACEMENT
COLLIS VALVE REPLACEMENT
COLORADO RIVER AQUEDUCT CASA LOMA SIPHON BARREL NO. 1 PROJECT NO. 2 - PERMANENT REPAIRS
COMMUNICATIONS STRUCTURE ALARM MONITORING
COMPREHENSIVE INFORMATION SECURITY ASSESSMENT PHASE III
CONSTRUCTION PHASE 2
CONTRACT & LITIGATION TASKS -CONTRACT # 1396

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Distribution Facilites

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 ELECTRICAL STRUCTURES REHABILITATION
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
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
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 OZONE COOLING WATER ALTERNATIVE SOURCE
DIRECTIONAL SIGNS FOR DIAMOND VALLEY LAKE FACILITY
DISCHARGE ELIMINATION
DIST SYS-AIR RELEASE & VAC VALVE MODS
DISTRIBUTION SYSTEM - CCPP CONSTRUCTION PACKAGES 9,11,12
DISTRIBUTION SYSTEM - STANDPIPE STRENGTHENING PROGRAM
DISTRIBUTION SYSTEM - STATIONARY CORROSION REFERENCE
DISTRIBUTION SYSTEM - TREATED WATER CROSS CONNECTION PREVENTION PROJECT - FINAL DESIGN & CONSTRUCTION
DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF LOS ANGELES COUNTY
DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF RIVERSIDE AND SAN DIEGO COUNTY
DISTRIBUTION SYSTEM ASSESSMENTS/UPGRADES OF SAN BERNARDINO COUNTY
DISTRIBUTION SYSTEM CONTROL & EQUIP UPGRADE - ENHANCED DISTRIB. SYSTEM AUTOMATION PHASE I
DISTRIBUTION SYSTEM EQUIPMENT & INSTRUMENTATION UPGRADES
DISTRIBUTION SYSTEM INFRASTRUCTURE PROTECTION IMPROVEMENTS FOR ORANGE COUNTY
DISTRIBUTION SYSTEM REHABILITATION PROGRAM - ASSESS THE STATE OF MWD'S DISTRIBUTION SYSTEM
DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS - WILLOWGLEN RTUS ADMINISTRATION
DISTRIBUTION SYSTEM REPLACEMENT OF AREA CONTROL SYSTEMS (DSRACS)
DISTRICT WIDE - ENHANCED VAPOR RECOVERY PHASE 2 GASOLINE DISPENSING
DSRACS - OPERATIONS CONTROL CENTER - CONTRACT #1396
DSRACS - SKINNER AREA
DSRACS - SOFTWARE DEVELOPMENT COST
DSRACS - WEYMOUTH
DVL & CONTROL SYSTEM REPLACEMENT INVESTIGATION & PREPARATION FOR PRELIMINARY DESIGN
DVL VIEWPOINT ROAD SECURITY UPGRADES
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

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Distribution Facilites

EAST ORANGE COUNTY FEEDER #2 REPAIR
EAST ORANGE COUNTY FEEDER NO. 2 SERVICE CONNECTION A-6 REHABILITATION
EAST VALLEY FEEDER VALVE STRUCTURE ELECTRICAL UPGRADE
EASTERN AND DESERT REGIONS PLUMBING RETROFIT
EASTERN REGION PCCP JOINT MODIFICATION 2012
E-DISCOVERY STORAGE MANAGEMENT SYSTEM UPGRADE
ELECTRIC CURRENT DRAIN STATION INSTALLATIONS
ELECTRICAL UPGRADES AT 15 STRUCTURES, OC REGION
ELECTROMAGNETIC INSPECTIONS 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
ENVIRONMENTAL REGULATORY AGREEMENTS AND OTHER REGULATORY AGENCY
EQUIPMENT UPGRADE AT THE NORTH PORTAL OF THE HOLLYWOOD TUNNEL
ETIWANDA / RIALTO PIPELINE INTER-TIE CATHODIC PROTECTION
ETIWANDA CAVITATION FACILITY INFRASTRUCTURE REHABILITATION
ETIWANDA CAVITATION TEST FACILITY COMMUNICATION AND CONTROL SYSTEM REPLACEMENT
ETIWANDA HEP NEEDLE VALVE OPERATORS
ETIWANDA PIPELINE - LINING REPLACEMENT
ETIWANDA PIPELINE AND CONTROL FACILITY - RIGHT OF WAY
ETIWANDA PIPELINE AND CONTROL FACILITY - AS BUILTS
ETIWANDA PIPELINE AND CONTROL FACILITY - CATHODIC PROTECTION
ETIWANDA PIPELINE AND CONTROL FACILITY - AS BUILTS
ETIWANDA PIPELINE AND CONTROL FACILITY - CATHODIC PROTECTION
ETIWANDA PIPELINE AND CONTROL FACILITY - EMERGENCY DISCHARGE CONDUITS
ETIWANDA PIPELINE AND CONTROL FACILITY - LANDSCAPING AND IRRIGATION
ETIWANDA PIPELINE AND CONTROL FACILITY - RESIDENCES
ETIWANDA PIPELINE AND CONTROL FACILITY - RIALTO FEEDER TO UPPER PIPELINE
ETIWANDA PIPELINE LINING REPAIRS
ETIWANDA PIPELINE LINING REPLACEMENT
ETIWANDA RESERVOIR - EXTEND OUTLET STRUCTURE
FACILITY AND PROCESS RELIABILITY ASSESSMENT
FAIRPLEX AND WALNUT PCS VALVES REPLACEMENT
FILTER ISOLATION GATE AND BACKWASH CONTROL WEIR COVERS MODULES 1- 6
FLOW METER REPLACEMENT PROJECT
FLOWMETER MODIFICATION - LAKE SKINNER INLET, ETIWANDA EFFLUENT & WADSWORTH CROSS CHANNEL
FOOTHILL & SEPULVEDA FEEDER PCCP CARBON FIBER JOINT REPAIRS
FOOTHILL FEEDER - CASTAIC VALLEY BLOW-OFF VALVES REPLACEMENT
FOOTHILL FEEDER ADEN AVE. REHABILITATION
FOOTHILL FEEDER CARBON FIBER REPAIR
FOOTHILL FEEDER CATHODIC PROTECTION
FOOTHILL FEEDER PIPELINE REPLACEMENT PROJECT
FOOTHILL FEEDER POWER PLANT EXPANSION
FOOTHILL FEEDER REPAIR @ SANTA CLARITA RIVER
FOOTHILL FEEDER, CARBON FIBER REPAIRS
FOOTHILL HYDROELECTRIC RUNNER REPLACEMENT
FOOTHILL PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION
FOOTHILL PCS FLOOD PUMP INSTALLATION DESIGN DOCUMENTATION
FOOTHILL PCS INTERNAL VALVE LINERS UPGRADE
FUTURE SYSTEM RELIABILITY PROGRAM
GARVEY RESERVOIR - HYPOCHLORITE FEED SYSTEM
GARVEY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS
GARVEY RESERVOIR - LOWER ACCESS PAVING ROAD & DRAINS
GARVEY RESERVOIR CONTROL VALVES REPLACEMENT
GARVEY RESERVOIR HYPOCLORITE FEED SYSTEM
GARVEY RESERVOIR SITE DRAINAGE REPAIRS AND MODIFICATIONS
GARVEY RESERVOIR SODIUM HYPOCLORITE FEED SYSTEM REHABILITATION
GENE & IRON POOLS
GENE AIR CONDITIONING SYSTEM REPLACEMENT
GENE MESS HALL AIR CONDITIONING UNIT
GENE SPARE PARTS WAREHOUSE IMPROVEMENTS
GLENDALE 01 SERVICE CONNECTION REHAB
GLENDALE-01 SERVICE CONNECION REHABILITATION AND UPGRADE
GLENDALE-01 SERVICE CONNECTION REHABILITATION
GREG AVE PCS FACILITY REHABILITATION
GLENDALE-01 SERVICE CONNECTION REHABILITATION
GREG AVE PCS FACILITY REHABILITATION
GREG AVENUE CONTROL STRUCTURE VALVE REPLACEMENT
GREG AVENUE PCS - PUMP MODIFICATIONS AND NEW CONTROL BUILDING
GREG AVENUE PCS CONTROL BUILDING INTERIOR REHABILITATION
HINDS GARAGE ASBESTOS SHEETING REPLACEMENT
HOLLYWOOD TUNNEL NORTH PORTAL EQUIPMENT UPGRADES
HVAC MODIFICATIONS FOR ELECTRICAL SAFETY AND RELIABILITY
HYDRAULIC MODELING PROJECT
HYDROELECTRIC PLANT CARBON DIOXIDE (CO2) FIRE SUPPRESSION SYSTEM MODIFICATIONS
HYDROELECTRIC POWER PLANT (HEP) DISCHARGE ELIMINATION
IAS PROJECTS - CPA
IAS PROJECTS - DVL-SKINNER
IAS PROJECTS - MILLS SUPPLY RELIABILITY
INLAND FEEDER AND LAKEVIEW PIPELINE INTERTIE
INLAND PCSUST REMOVAL & AST INSTALLATION
INSTALL MOTION SENSORS IN NEW EXPANSION
INSTALL TEST LEADS AT FOUR LOCATIONS
INSULATION JOINT TEST STATIONS
INTAKE PUMPING PLANT - UNDER FREQUENCY PROTECTION RELAY UPGRADE
IRON MOUNTAIN - TRANSFORMER OIL TANK RELOCATION
JENSEN DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT # 1396
JENSEN EGEN UST UPGRADE - LINE LEAK DETECTOR INSTALLATION
JENSEN FILTER EFFLUENT TURBIDIMETER RELIABILITY

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Distribution Facilites

JENSEN FILTRATION PLANT - REPLACE ADMINISTRATION BUILDING AIR CONDITIONING
JENSEN FILTRATION PLANT - ROAD RECONSTRUCTION
JENSEN FLUORIDE TANK REPLACEMENT
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 FENCING SECURITY UPGRADE
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 BYPASS PIPELINE RELINING
LAKE PERRIS EMERGENCY STANDBY GENERATOR AND TRANSFER SWITCH REPLACEMENT
LAKE SKINNER - AERATOR AIR COMPRESSOR REPLACEMENT
LAKE SKINNER - OUTLET TOWER VALVE REHABILITATION
LAKE SKINNER - REPLACEMENT AERATOR RING
LAKE SKINNER AERATOR AIR COMPRESSOR REPLACEMENT
LAKE SKINNER AREA DISTRIBUTION SYSTEM VALVE REPLACEMENT
LAKE SKINNER DAM ROAD REHAB
LAKE SKINNER EAST BYPASS SCREENING STRUCTURES
LAKE SKINNER OUTLET TOWER CHLORINE SYSTEM MODIFICATION
LAKE SKINNER WEST BYPASS SCREENING STRUCTURE
LAKE SKINNER WEST BYPASS SCREENING STRUCTURE REHABILITATION
LAKE VIEW PIPE LINE REPAIRS
LAKEVIEW PIPELINE - REPLACE VACUUM/AIR RELEASE
LAKEVIEW PIPELINE CATHODIC PROTECTION SYSTEM
LAKEVIEW PIPELINE RELINING
LAKEVIEW PIPELINE REPAIR
LAKEVIEW PIPELINE UPGRADE
LIVE OAK RESERVOIR BYPASS PIPELINE CATHODIC PROTECTION
LOWER FEEDER - CATHODIC PROTECTION
LOWER FEEDER WR 33 - AREA REPAIR AND REMEDIATION
MAGAZINE CANYON CANOPY
MAGAZINE CANYON-ISOLATION GATE JACKING FRAME
MAPES LAND ACQUISTION
MICROWAVE COMMUNICATION SITES BUILDING UPGRADE
MIDDLE CROSS FEEDER CATHODIC PROTECTION
MIDDLE FEEDER - CATHODIC PROTECTION SYSTEMS
MIDDLE FEEDER - NORTH CATHODIC PROTECTION SYSTEM
MIDDLE FEEDER BLOW-OFF VALVE REPLACEMENT AT STA 782+53.16
MIDDLE FEEDER NORTH CATHODIC PROTECTION SYSTEM
MIDDLE FEEDER RELOCATION FOR SCE MESA SUBSTATION
MILLS FILTRATION PLANT - INVESTIGATION TO RELOCATE ACCESS ROAD
MINOR CAP 08/09 PLACEHOLDER
MINOR CAP FY 2009/10
MINOR CAP FY 2012/13
MINOR CAP FY 2014/16
MINOR CAPITAL PROJECTS PROGRAM 07/08 - REMAINING FUNDS
MOUNT OLYMPUS TUNNEL COST RIGHT-OF-WAY (ROW)
MWD ROAD GUARDRAIL
NITROGEN STORAGE COMPLIANCE AT DVL, INLAND FEEDER PCS, AND LAKE MATHEWS
NITROGEN STORAGE STUDY
NON PCCP LINES CONDITION INSPECTION AND ASSESSMENT
NORTH PORTAL OF HOLLYWOOD TUNNEL
NORTH REACH CONSTRUCTION / INSPECTION / CM
NORTH REACH CONSTRUCTION/ASBUILT
NORTH REACH ENVIRONMENTAL - CONSTRUCTION
NORTH REACH FINAL DESIGN & ADV/NTP
NORTH REACH POST DESIGN / ASBUILT
NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION
NORTHERN PIPELINE ENVIRONMENTAL FINAL DESIGN
NORTHERN PIPELINE RIGHT OF WAY FINAL DESIGN
OAK ST. PCS ROOF REPLACEMENT
OAK STREET PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT - CONSTRUCTION
OC 44 SERVICE CONNECTIONS & EOC#2 METER ACCESS ROAD REHAB
OC FEEDER STA 1920+78 BLOWOFF STRUCTURE & RIP-RAP REPAIRS
OC RESERVOIR SODIUM HYPOCHLORITE PUMP AND PIPING REPLACEMENT
OC-71 FLOW CONTROL FACILITY
OC-88 - SECURITY FENCING AT PUMP PLANT
OC-88 EMERGENCY STANDBY GENERATOR UPGRADE STUDY
OC-88 PUMP PLANT AIR COMPRESSOR UPGRADE
OC-88 PUMP STATION FLOW METER UPGRADE
OC-88 PUMPING PLANT SURGE TANKS UPGRADES
OC-88 PUMPING PLANT UPGRADES
OLINDA PCS AND SANTIAGO TOWER EMERGENCY GENERATORS
OLINDA PCS VALVE REPLACEMENT
OLINDA PRESSURE CONTROL STRUCTURE
OLINDA PRESSURE CONTROL STRUCTURE AND SANTIAGO TOWER EMERGENCY GENERATORS

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Distribution Facilites

ON-CALL RESOURCES MANAGEMENT APPLICATION
OPERATIONS CONTROL CENTER AT EAGLE ROCK
OPERATIONS CONTROL CENTER UPS REPLACEMENT
OPERATIONS SCOPING STUDY
ORANGE CO FDR, BLOW-OFF STRUCTURE AND ACCESS ROAD REPAIR
ORANGE COUNTY - 88 PUMP PLANT AIR COMPRESSOR UPGRADE
ORANGE COUNTY - 88 SECURITY FENCING AT PUMP PLANT
ORANGE COUNTY AREA DISTRIBUTION SYSTEM VALVE REPLACEMENT
ORANGE COUNTY C & D ELECTRICAL IMPROVEMENTS - STUDY
ORANGE COUNTY C&D INSTRUMENTATION PANEL IMPROVEMENTS
ORANGE COUNTY C&D TEAM SUPPORT FACILITY
ORANGE COUNTY CONVEYANCE AND DISTRIBUTION SERVICE CENTER
ORANGE COUNTY FEEDER CATHODIC PROTECTION
ORANGE COUNTY FEEDER CATHODIC PROTECTION SYSTEM REHABILITATION
ORANGE COUNTY FEEDER EXTENSION LINING REPAIR
ORANGE COUNTY FEEDER INSPECTION
ORANGE COUNTY FEEDER INTERNAL INSPECTION STUDY
ORANGE COUNTY FEEDER LINING REPAIRS
ORANGE COUNTY FEEDER PRESSURE CONTROL STRUCTURES
ORANGE COUNTY FEEDER RELINING
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 REGION ENVIRONMENTAL MITIGATION MONITORING
ORANGE COUNTY RESERVOIR - INSTALL HYPOCHLORINATION STATIONS
ORANGE COUNTY RESERVOIR - PIEZOMETERS & SEEPAGE MONITORING AUTOMATION
OXIDATION DEMONSTRATION PLANT CONTROL SYSTEM REPLACEMENT
PALOS ALTOS FEEDER - 108TH ST.
PALOS VERDES FEEDER - LONG BEACH LATERAL TURNOUT STRUCTURES STA. 1442+15 VALVE REPLACEMENTS
PALOS VERDES FEEDER PCS - VALVE REPLACEMENT
PALOS VERDES RESERVOIR - INSTALL HYPOCHLORINATION STATIONS
PC-1 EFFLUENT OPEN CHANNEL TRASH RACK
PC-1 EFFLUENT OPEN CHANNEL TRASH RACK PROJECT
PCCP HYDRAULIC ANALYSES
PCCP REHABILITATION - PROGRAM MANAGEMENT
PERIMETER FENCING AT PLACERITA CREEK
PERMANENT LEAK DETECTION/PIPELINE MONITORING SYSTEM
PERRIS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION
PERRIS CONTROL FACILITY BYPASS & PCS UPGRADE
PERRIS PCS ROOF REHAB
PERRIS PRESSURE CONTROL STRUCTURE ROOF REPLACEMENT
PERRIS PUMPBACK COVER
PERRIS VALLEY PIPELINE - DESIGN-BUILD (EMWD)
PERRIS VALLEY PIPELINE - GENERAL
PERRIS VALLEY PIPELINE - NORTH REACH
PERRIS VALLEY PIPELINE - RESERVED FOR STAGE II DESIGN / BUILD
PERRIS VALLEY PIPELINE - SOUTH REACH
PERRIS VALLEY PIPELINE - STUDY
PERRIS VALLEY PIPELINE - TIE-IN (WMWD)
PERRIS VALLEY PIPELINE - TUNNELS
PERRIS VALLEY PIPELINE - VALVES
PERRIS VALLEY PIPELINE DESIGN-BUILD (EMWD)
PERRIS VALLEY PIPELINE NORTH REACH
PERRIS VALLEY PIPELINE SOUTH REACH
PERRIS VALLEY PIPELINE TIE-IN (WMWD)
PERRIS VALLEY PIPELINE VALVES
PLACENTIA RAILROAD LOWERING PROJECT
PLACERITA CREEK PERIMETER FENCING
PLANT INFLUENT REDUNDANT FLOW METERING AND SPLITTING
PLC REPLACEMENT PHASE II
PRESTRESSED CONCRETE CYLINDER PIPE - PHASE 2
PRESTRESSED CONCRETE CYLINDER PIPE (PCCP) STRUCTURAL PEFORMANCE RISK ANALYSIS
PRESTRESSED CONCRETE CYLINDER PIPE -PHASE 3
PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF ORANGE COUNTY
PROGRAMATTIC ENVIRONMENTAL DOCUMENTATION OF SAN BERNARDINO COUNTY
PROGRAMMABLE LOGIC CONTROLLER (PLC) STANDARDIZATION
PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE LOS ANGELES CO. OPERATING REGION
PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE ORANGE COUNTY OPERATING REGION
PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE RIVERSIDE/SAN DIEGO CO. OPERATING REGION
PROGRAMMATIC ENVIRONMENTAL DOCUMENTATION FOR THE WESTERN SAN BERNARDINO COUNTY OPERATING REGION
PUDDINGSTONE SPILLWAY CROSS CONNECTION
PV RESERVOIR HYPOCHLORITE PUMP AND PIPING REPLACEMENT
R&R FOR DISTRIBUTION
REAL PROPERTY ACQUISITION
RED MOUNTAIN - OCT. 2007 FIRE DAMAGE - COMMUNICATION POWER TOWERS & METER STRUCTURES REPAIR/REPLACE (INCIDENT NO. 2007-1023-0271)
RED MOUNTAIN HEP FLOOD DAMAGE
RED MTN COMM. TOWER & METER STRUCTURE
REHABILITATION OF THE GREG AVE PCS CONTROL BUILDING INTERIOR
RELOCATION OF ORANGE COUNTY FEEDER
RELOCATION OF PORTION OF ORANGE COUNTY FEEDER (MWD'S SHARE)
REMAINING PORTIONS
REPAIRS TO THE LA-35 DISCHARGE STRUCTURE
REPLACE 2 FIRE & DOMESTIC WATER SYSTEM
REPLACE COMMUNICATION LINE TO THE SAN GABRIEL CONTROL TOWER
REPLACE COPPER GROUNDWIRES ON DESERT HIGH VOLTAGE TRANSMISSION TOWERS
REPLACE VALVE POSITION INDICATORS
REPLACEMENT OF COMMUNICATION LINE AT SAN GABRIEL TOWER
REPLACEMENT/ RELINE AT-RISK PCCP LINES - STAGE 1
RIALTO FEEDER BROKEN BACK REPAIR
RIALTO FEEDER VALVE STRUCTURE
RIALTO FEEDER, REPAIRS AT SELECT LOCATIONS, STUDY
RIALTO PIPELINE - CONSTRUCTION PHASE 1
RIALTO PIPELINE - CONSTRUCTION PHASE 2
RIALTO PIPELINE IMPROVEMENTS
RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Distribution Facilites

RIALTO PIPELINE IMPROVEMENTS - CONSTRUCTION PHASE III
RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 2
RIALTO PIPELINE IMPROVEMENTS - DESIGN PHASE 3
RIALTO PIPELINE IMPROVEMENTS - FINAL DESIGN
RIALTO PIPELINE IMPROVEMENTS - VALVE PROCUREMENT
RIALTO PIPELINE IMPROVEMENTS PHASE 1 FINAL DESIGN
RIALTO PIPELINE PCCP REHABILITATION
RIALTO PIPELINE REPAIR @ STA 3196+44
RIALTO PIPELINE REPAIR AT THOMPSON CREEK
RIALTO PIPELINE REPAIRS AT STATION 3198+44
RIALTO PIPELINE VALVE PROCUREMENT
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - LOS ANGELES COUNTY REGION
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - O. C. REGION
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - RIVERSIDE AND SAN DIEGO COUNTY REGION
RIGHT OF WAY INFRASTRUCTURE PROTECTION PROGRAM - WESTERN SAN BERNARDINO COUNTY REGION
RIGHT OF WAY SURVEY AND MAPPING
RIO HONDO PRESSURE CONTROL STRUCTURE VALVE REPLACEMENTS
ROBERT B. DIEMER FILTRATION PLANT - LAND ACQUISITION
ROOF REPLACEMENT AT SOTO ST. FACILITY
SAN DIEGO #3 BLOWOFF TO PUMPWELL CONVERSION
SAN DIEGO CANAL - EAST & WEST BYPASS SCREENING STRUCTURES STUDY
SAN DIEGO CANAL - ELECTRICAL VAULT & CONDUCTOR REPLACEMENT
SAN DIEGO CANAL - FENCING
SAN DIEGO CANAL - INSTALL ACOUSTIC FLOW METER
SAN DIEGO CANAL - PIEZOMETER
SAN DIEGO CANAL - REPLACE SODIUM BISULFATE TANK
SAN DIEGO CANAL - SEEPAGE STUDY
SAN DIEGO CANAL BISULFITE TANK REPLACEMENT
SAN DIEGO CANAL LINER REPAIR
SAN DIEGO CANAL RADIAL GATE (V0-6) REHABILITATION
SAN DIEGO CANAL RADIAL GATE (VO-8) REHABILITATION
SAN DIEGO CANAL RADIAL GATE REHAB
SAN DIEGO CANAL SEEPAGE STUDY
SAN DIEGO CANAL WEST BYPASS TRASH RACK
SAN DIEGO PIPELINE #4 VALVE REPLACEMENT
SAN DIEGO PIPELINE 1 BLOW-OFF VALVE REPLACEMENT
SAN DIEGO PIPELINE 3 & 5 REMOTE CONTROL OF BYPASS
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. 1 JOINT REPAIR
SAN DIEGO PIPELINE NO. 3 BYPASS
SAN DIEGO PIPELINE NO. 3 PIPING MODIFICATIONS
SAN DIEGO PIPELINE NO. 5 - OCT. 2007 FIRE DAMAGE - REPLACE ABOVE GROUND CORROSION CONTROL SYSTEM EQUIPMENT, AND STRUCTURAL APPURTENANCES
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - ETIWANDA FACILITY/DROP INLET STRUCTURE
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE BRANCH - PLEASANT PEAK, COMMUNICATIONS
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL CONSTRUCTION - AS BUILT
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL COST OF RIGHT OF WAY (OPTIONAL PORTAL SITE)
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL CONSTRUCTION
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL ENVIRONMENTAL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL PROGRAM MANAGEMENT
SAN DIEGO PIPELINE NO. 6 - RIVERSIDE TUNNEL RIGHT OF WAY PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.1 SAN DIEGO CANAL TO MOUNT OLYMPUS
SAN DIEGO PIPELINE NO. 6 - CONTRACT NO.2 MOUNT OLYMPUS TUNNEL & PORTALS
SAN DIEGO PIPELINE NO. 6 - NORTH REACH CONSTRUCTION - AS BUILT
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL - CONSTRUCTION
SAN DIEGO PIPELINE NO. 6 - NORTH REACH ENVIRONMENTAL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH FINAL DESIGN & ADV/NTP
SAN DIEGO PIPELINE NO. 6 - NORTH REACH POST DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - CONSTRUCTION
SAN DIEGO PIPELINE NO. 6 - NORTH REACH PROGRAM MANAGEMENT - DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY FINAL DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTH REACH RIGHT OF WAY PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - NORTHERN PIPELINE COST OF RIGHT OF WAY
SAN DIEGO PIPELINE NO. 6 - NORTHERN REACH ENVIRONMENTAL FINAL DESIGN
SAN DIEGO PIPELINE NO. 6 - OPERATIONS SCOPING STUDY
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - DESIGN
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - ENVIRONMENTAL
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - PROJECT MANAGEMENT
SAN DIEGO PIPELINE NO. 6 - PIPELINE/TUNNEL STUDY - RIGHT OF WAY
SAN DIEGO PIPELINE NO. 6 - PROJECT MANAGEMENT
SAN DIEGO PIPELINE NO. 6 - RIGHT OF WAY
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH - PROGRAM MANAGEMENT
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH / TUNNEL STUDY
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH CONSTRUCTION / AS BUILT
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH COST OF RIGHT OF WAY
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL - CONSTRUCTION
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL FINAL DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH ENVIRONMENTAL PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH FINAL DESIGN/ADV
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY FINAL DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH RIGHT OF WAY PRELIMINARY DESIGN
SAN DIEGO PIPELINE NO. 6 - SOUTH REACH TUNNEL ALIGNMENT ANALYSIS
SAN DIEGO PIPELINE NO. 6 AREA STUDY
SAN DIEGO PIPELINE NO. 6 ENVIRONMENTAL MITIGATION
SAN DIEGO PIPELINE NO.4 & AULD VALLEY PIPELINE CARBON FIBER REPAIR STUDY
SAN DIEGO PIPELINE NOS. 1AND 3 - VALVE REPLACEMENT
SAN DIMAS AND RED MOUNTAIN POWER PLANTS STANDBY DIESEL ENGINE GENERATOR REPLACEMENTS
SAN DIMAS CONTROL STRUCTURE 500 GALLONS DIESEL TANK REPLACEMENT
SAN DIMAS HEP BATTERY BANK AND GENERATOR BREAKER
SAN DIMAS PCS - UNINTERRUPTIBLE POWER SOURCE SYSTEMS INSTALLATION
SAN FRANCISQUITO PIPELINE BLOW OFF STRUCTURE, STA 287+70, ACCESS ROAD CONSTRUCTION
SAN GABRIEL TOWER AND SPILLWAY IMPROVEMENTS

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Distribution Facilites

SAN GABRIEL TOWER SEISMIC UPGRADE
SAN GABRIEL TOWER SLIDE GATE REHABILITATION
SAN JACINTO #1 AND #2 CASA LOMA FAULT CROSSING STRUCTURE UPGRADE
SAN JACINTO DIVERSION STRUCTURE SLIDE GATE V-03 REPLACEMENT
SAN JOAQUIN RELIEF STRUCTURE FOR EASTERN ORANGE COUNTY FEEDER #2
SAN JOAQUIN RELIEF STRUCTURE FOR EASTR OC FDR #2
SAN JOAQUIN RESERVOIR, INSTALL BULKHEAD
SANTA ANA RIVER BRIDGE EXPANSION JOINT REPLACEMENT
SANTA ANA RIVER BRIDGE SEISMIC RETROFIT
SANTA ANA RIVER BRIDGE SEISMIC UPGRADE
SANTA MONICA FEEDER RELOCATION
SANTA MONICA FEEDER STATION 495+10 REHABILITATION
SANTIAGO CONTROL TOWER CATHODIC PROTECTION
SANTIAGO LATERAL REPLACE MOTOR - OPERATED VALVE
SANTIAGO LATERAL SECTIONALIZATION VALVE REPLACEMENT
SANTIAGO LATERAL STA 216+40 BUTTERFLY VALVE REPLACEMENT
SANTIAGO PRESSURE CONTROL STRUCTURE
SANTIAGO TOWER ACCESS ROAD IMPROVEMENT
SCADA COMMUNICATIONS MPLS UPGRADE - AT&T REGION (MINOR CAP)
SCADA COMMUNICATIONS MPLS UPGRADE - VERIZON REGION (MINOR CAP)
SCADA SYSTEM HARDWARE UPGRADE
SCADA SYSTEM NT SOFTWARE UPGRADE
SCADA SYSTEM SUPPORT PROGRAMS
SD AND CASA LOMA CANALS LINING
SD CANAL EAST & WEST BYPASS SCREENING STRUCTURES STUDY
SD CANAL REPLACE SODIUM BISULFITE TANK
SD PIPELINE 3 CULVERT ROAD REHAB
SD PIPELINE 3,4, AND 5 PROTECTIVE COVER
SD PIPELINE 4 EXPLORATORY EXCAVATION
SD PIPELINE 5 EXPLORATOTY EXCAVATION
SD PIPELINES 3 AND 5 REMOTE CONTROL BYPASS STRUCTURE GATES AND ISOLATION VALVES
SECOND LOWER & SEPULVEDA FEEDERS SCI DRAIN STATIONS
SECOND LOWER CROSS FEEDER - VALVE PROCUREMENT
SECOND LOWER CROSS FEEDER CONSTRUCTION
SECOND LOWER CROSS FEEDER FINAL DESIGN
SECOND LOWER FEEDER - INSTALL LINER
SECOND LOWER FEEDER CATHODIC PROTECTION SYSTEM
SECOND LOWER FEEDER CURRENT MITIGATION REFURBISHMENT
SECOND LOWER FEEDER PCCP REHABILITATION
SECOND LOWER FEEDER PCCP REPAIRS
SECOND LOWER FEEDER RELIABILITY AT 3 LOCATIONS - SEISMIC STUDY
SEISMIC UPGRADE OF 11 FACILITIES ON THE ALLEN MCCOLLOCH PIPELINE
SEISMIC UPGRADES AT 10 SERVICE CONNECTION STRUCTURES ALONG AMP
SELECTED PRESSURE REPLACE VALVE POSITION INDICATORS
SEPULVEDA CANYON CONTROL FACILITY BYPASS PROJECT
SEPULVEDA CANYON CONTROL FACILITY WATER STORAGE TANKS SEISMIC UPGRADE
SEPULVEDA CANYON POWER PLANT TAIL RACE COATINGS
SEPULVEDA CANYON TANKS EXTERIOR AND INTERIOR RECOATING
SEPULVEDA FEEDER - CARBON FIBER LINER REPAIRS
SEPULVEDA FEEDER CATHODIC PROTECTION SYSTEM
SEPULVEDA FEEDER CORROSION/INTERFERENCE MITIGATION, STATION 950+00 TO 1170+00
SEPULVEDA FEEDER HEP AUTO PILOT
SEPULVEDA FEEDER PCCP DEL AMO BLVD URGENT RELINING
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 FEEDER/EAST VALLEY FEEDER INTERCONNECTION ELECTRICAL UPGRADES
SEPULVEDA PCS - PERIMETER ASPHALT REPAIRS
SEPULVEDA PIPELINE PCCP REHABILITATION
SEPULVEDA-WEST BASIN INTERCONNECTION VALVE REPLACEMENTS
SERVICE CONNECTION LV-01 UPGRADES
SERVICE CONNECTION OC-26 - RELOCATION OF METER CABINET, INSTRUMENT HOUSING & AIR VENT STACK
SERVICE CONNECTION WB13 - WEST BASIN FEEDER
SERVICE CONNECTIONS CB-12 & CB-16 TURNOUT VALVE REPLACEMENT & ELECTRICAL UPGRADE
SERVICE CONNECTIONS WB-2A AND WB-2B EQUIPMENT RELOCATION
SIMULATION AND MODELING APPLICATION FOR REAL TIME OPERATIONS SMART OPS
SITE 3 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN
SITES 1 & 2 SECOND LOWER FEEDER URGENT REPAIRS - FINAL DESIGN & PIPE FABRICATION
SKINNER ACCUSONIC FLOWMETER REPLACEMENT
SKINNER BRANCH - AIR INJECTION MODIFICATIONS TO RED MOUNTAIN POWER PLANT
SKINNER BRANCH - CASA LOMA CANAL
SKINNER BRANCH - CASA LOMA SIPHON BARREL ONE

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description

Distribution Facilites

SKINNER BRANCH - CATWALK FOR TRAVELING MAINTENANCE BRIDGE FOR
SKINNER BRANCH - FABRICATE & REPLACE THE STEMS, NUTS & KEYS
SKINNER BRANCH - REPAIR MODULE 1 AND 2 FLOCCULATORS BRIDGES
SKINNER DAM REMEDIATION
SKINNER DISTRIBUTION SYSTEM - CONTRACT # 1396
SKINNER ELECTRICAL BUILDING HVAC UPGRADE
SKINNER FACILITY AREA PAVING
SKINNER FILTRATION PLANT - ELEVATED SLAB IN SERVICE BLDG 1
SKINNER HELIPAD REHAB
SKINNER REPLACEMENT FOR WETCELL BATTERY AND INVERTER
SKINNER SCADA SERVERS RELOCATION
SMART-OPS (FORMERLY RTOS)
SOTO STREET FACILITY - BUILDING SEISMIC UPGRADE
SOTO STREET FACILITY - REPLACE HEATING
SOTO STREET FACILITY - ROOF REPLACEMENT
SOUTH COUNTY PIPELINE PROTECTION AT SAN JUAN CREEK CROSSING
SOUTH REACH / TUNNEL STUDY
SOUTH REACH CONSTRUCTION/ASBUILT - FUTURE UNAPPROPRIATED
SOUTH REACH DESIGN - FUTURE/UNAPPROPRIATED
SOUTH REACH ENVIRONMENTAL - FUTURE/UNAPPROPRIATED
SOUTH REACH FEASIBILITY STUDY
SOUTH REACH PROJECT MANAGEMENT - FUTURE/UNAPPROPRIATED
SOUTH REACH RIGHT OF WAY - FUTURE/UNAPPROPRIATED
SPECIAL SERVICE BRANCH - REPLACE PLATE BENDING
ST. JOHN'S CANYON CHANNEL EROSION MITIGATION
SYSTEM RELIABILITY PROGRAM
SYSTEM-WIDE ASPHALT REPLACEMENT
TEMESCAL POWER PLANT REPLACE EMERGENCY GENERATOR
TREATED WATER CROSS CONNECTION PREVENTION - FINAL DESIGN & CONSTRUCTION
TREATED WATER CROSS CONNECTION PREVENTION - UNFUNDED WORK
TWO-WAY RADIO ENHANCEMENT - EMERGENCY SERVICES, FIRE CONTROL, EVACUATION & BLDG. MAINT.
TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BLDG. MAINTENANCE
UNDER GROUND STORAGE TANK DISPENSER SPILL CONTAINMENT & REMEDIATION
UNION STATION TWO-WAY RADIO ENHANCEMENT FOR EMERGENCY SERVICES, FIRE CONTROL, EVACUATION AND BUILDING MAINTENANCE
UPGRADE CATHODIC PROTECTION RECTIFIERS
UPGRADE HOLLYWOOD TUNNEL PORTAL SLEEVE VALVE EQUIPMENT
UPGRADE SUNSET GARAGE
UPPER FEEDER - SANTA ANA RIVER BRIDGE REPAIRS
UPPER FEEDER - STRUCTURAL PROTECTION
UPPER FEEDER AIR ENTRAINMENT
UPPER FEEDER CATHODIC PROTECTION SYSTEM
UPPER FEEDER GATE REHABILITATION
UPPER FEEDER JUNCTION STRUCTURE SEISMIC UPGRADE
UPPER FEEDER SANTA ANA RIVER DISCHARGE PAD
UPPER FEEDER SERVICE CONNECTIONS UPGRADES
UPPER NEWPORT BAY BLOW-OFF STRUCTURE REHABILITATION
UPS SYSTEMS INSTALLATION AT FOOTHILL PCS
UPS SYSTEMS INSTALLATION AT PERRIS CONTROL STRUCTURE
UTILITY BUSINESS ARCHITECTURE (OBJECT MAPPING/MODELING)
VACUUM AIR RELEASE VALVE RELOCATION PILOT PROGRAM
VALLEY & LOS ANGELES DISTRIBUTION VALVE POSITION DISPLAY UPGRADE
VALVE PROCUREMENT
VIDEO CONFERENCE SYSTEM UPGRADE
VIDEOCONFERENCING UPGRADE
WADSWORTH PUMPING PLANT - MODIFICATION/REPAIRS OF FIFTY-NINE 6.9KV BREAKERS/CABINETS
WADSWORTH PUMPING PLANT CONDUIT REPAIR AND PROTECTION
WADSWORTH PUMPING PLANT CONTROL & PROTECTION UPGRADES
WADSWORTH PUMPING PLANT FOREBAY GANTRY CRANE UPGRADE
WADSWORTH PUMPING PLANT RECOATING 144" YARD PIPING
WADSWORTH PUMPING PLANT SLEEVE VALVE REFURBISHMENT
WADSWORTH PUMPING PLANT STOP LOGS ADDITION - STUDY
WADSWORTH PUMPING PLANT YARD PIPING LINING REPLACEMENT
WADSWORTH/DVL CONTROL & PROTECTION SYSTEM UPGRADE - UPS REPLACEMENT
WATER DELIVERY SYSTEM AUTOMATION
WATER PLANNING APPLICATION
WATER QUALITY - REMOTE MONITORING
WATER QUALITY LABORATORY BUILDING EXPANSION
WATER QUALITY MONITORING AND EVENT DETECTION SYSTEM
WEST COAST FEEDER - CATHODIC PROTECTION SYSTEMS
WEST OC FEEDER VALVE REPLACEMENT
WEST ORANGE COUNTY FEEDER OC-09 REHABILITATION
WEST ORANGE COUNTY FEEDER VALVE REPLACEMENT
WEST VALLEY AREA STUDY
WEST VALLEY FEEDER # 1 STAGE 2 VALVE STRUCTURE MODIFICATIONS - CONSTRUCTION
WEST VALLEY FEEDER NO. 1 - DE SOTO VALVE STRUCTURE IMPROVEMENTS
WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURE IMPROVEMENTS (STAGE 2)
WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURE IMPROVEMENTS (STAGE 3)
WEST VALLEY FEEDER NO. 1 ACCESS ROADS AND STRUCTURES IMPROVEMENTS
WEST VALLEY FEEDER NO. 1 VALVE STRUCTURE MODIFICATIONS
WESTERN REGION PLUMBING RETROFIT
WESTERN SAN BERNARDINO COUNTY REGION ENVIRONMENTAL MITIGATION MONITORING
WEYM. PLT/LA VERNE FAC-BACKFLO PREV ASSY
WEYMOUTH - BUILDING NO. 4 - HAND RAIL AND STAIRS ADDITION
WEYMOUTH - FLAG POLE AREA LANDSCAPE UPGRADE
WEYMOUTH ASPHALT REHABILITATION
WEYMOUTH COMPRESSED AIR SYSTEM
WEYMOUTH DISTRIBUTION SYSTEM - REPLACEMENT OF AREA CONTROL SYSTEMS - CONTRACT #1396
WEYMOUTH FLOCCULATOR REHABILITATION
WEYMOUTH WATER TREATMENT PLANT DOMESTIC AND FIRE WATER SYSTEM IMPROVEMENT
WFP - ASPHALT REHABILITATION
WFP - COMPRESSED AIR SYSTEM IMPROVEMENT
WFP - PURCHASE OF REAL PROPERTY
WFP - REPAIR TO BLDG # 1
YORBA LINDA FEEDER - STA 924+11 PORTAL ACCESS
YORBA LINDA FEEDER BYPASS

YORBA LINDA PORTAL STRUCTURE ACCESS/TELEGRAPH CREEK BRIDGE

TABLE 3
CONVEYANCE, DISTRIBUTION, AND STORAGE SYSTEM COSTS

Description		
Distribution Facilites		
Sub-total Distribution facilities costs	**$**	**76,379,326**

TABLE 4

FISCAL YEAR 2022/23
ESTIMATED READINESS-TO-SERVE CHARGE REVENUE

Member Agency	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2010/11 - FY2019/20	RTS Share	6 months @ $140 million per year (7/22-12/22)	Rolling Ten-Year Average Firm Deliveries (Acre-Feet) FY2011/12 - FY2020/21	RTS Share	6 months @ $154 million per year (1/23-6/23)	Total RTS Charge FY 2022/23
Anaheim	17,275.2	1.21%	848,899	19,376.9	1.37%	1,051,617	1,900,516
Beverly Hills	10,355.2	0.73%	508,852	10,308.7	0.73%	559,471	1,068,322
Burbank	13,339.1	0.94%	655,480	13,354.6	0.94%	724,777	1,380,257
Calleguas MWD	96,173.4	6.75%	4,725,935	96,573.4	6.81%	5,241,203	9,967,138
Central Basin MWD	37,402.1	2.63%	1,837,929	34,311.0	2.42%	1,862,116	3,700,045
Compton	522.9	0.04%	25,695	340.2	0.02%	18,463	44,158
Eastern MWD	96,004.3	6.74%	4,717,625	97,570.2	6.88%	5,295,301	10,012,926
Foothill MWD	8,204.3	0.58%	403,157	8,306.1	0.59%	450,786	853,943
Fullerton	7,573.6	0.53%	372,165	7,280.1	0.51%	395,103	767,268
Glendale	16,339.5	1.15%	802,919	16,256.7	1.15%	882,279	1,685,197
Inland Empire Utilities Agency	56,041.5	3.93%	2,753,864	55,761.7	3.93%	3,026,283	5,780,147
Las Virgenes MWD	20,472.7	1.44%	1,006,023	20,715.7	1.46%	1,124,276	2,130,299
Long Beach	29,958.6	2.10%	1,472,157	29,251.8	2.06%	1,587,545	3,059,703
Los Angeles	258,508.9	18.15%	12,703,057	273,537.0	19.28%	14,845,319	27,548,376
Municipal Water District of Orange County	199,974.3	14.04%	9,826,683	195,128.0	13.75%	10,589,929	20,416,612
Pasadena	18,721.0	1.31%	919,945	18,954.2	1.34%	1,028,677	1,948,622
San Diego County Water Authority	232,196.6	16.30%	11,410,078	214,362.4	15.11%	11,633,813	23,043,891
San Fernando	35.6	0.00%	1,749	29.7	0.00%	1,612	3,361
San Marino	0.0	0.07%	46,319	974.0	0.07%	52,861	99,180
Santa Ana	10,060.6	0.71%	494,375	9,606.6	0.68%	521,367	1,015,742
Santa Monica	4,865.2	0.34%	239,075	4,607.4	0.32%	250,051	489,126
Three Valleys MWD	63,723.8	4.47%	3,131,370	63,736.2	4.49%	3,459,072	6,590,442
Torrance	15,852.7	1.11%	778,997	15,549.0	1.10%	843,871	1,622,868
Upper San Gabriel Valley MWD	27,250.3	1.91%	1,339,072	30,096.0	2.12%	1,633,361	2,972,434
West Basin MWD	114,374.8	8.03%	5,620,347	113,660.3	8.01%	6,168,538	11,788,885
Western MWD	68,340.5	4.80%	3,358,234	69,139.3	4.87%	3,752,308	7,110,541
MWD Total	1,424,509.3	100.00%	$ 70,000,000	1,418,787.2	100.00%	$ 77,000,000	$ 147,000,000

Totals may not foot due to rounding

TABLE 5

FISCAL YEAR 2022/23
ESTIMATED STANDBY CHARGE REVENUE

Member Agencies	Total Parcel Charge	Number of Parcels Or Acres	Gross Revenues (Dollars) [1]
Anaheim	$ 8.55	69,024	590,155
Beverly Hills	-	-	-
Burbank	14.20	29,111	413,378
Calleguas MWD	9.58	260,024	2,491,030
Central Basin MWD	10.44	340,264	3,552,356
Compton	2.49	18,144	45,178
Eastern MWD	6.94	406,560	2,821,528
Foothill MWD	10.28	30,361	312,113
Fullerton	10.71	35,251	377,543
Glendale	12.23	45,057	551,050
Inland Empire Utilities Agency	7.59	262,180	1,989,945
Las Virgenes MWD	8.03	55,414	444,973
Long Beach	12.16	92,471	1,124,441
Los Angeles	-	-	-
Municipal Water District of Orange County [2]	10.09	662,675	7,534,624
Pasadena	11.73	39,489	463,203
San Diego County Water Authority	11.51	1,112,302	12,802,601
San Fernando	-	5,102	-
San Marino	8.24	4,972	40,972
Santa Ana	7.88	65,040	512,519
Santa Monica	-	-	-
Three Valleys MWD	12.21	151,490	1,849,691
Torrance	12.23	40,578	496,264
Upper San Gabriel Valley MWD	9.27	214,737	1,990,616
West Basin MWD	-	-	-
Western MWD	9.23	389,885	3,598,640
MWD Total		4,330,132	$ 44,002,818

(1) Estimates per FY 2021/22 applied amounts
(2) Adjusted for inclusion of Coastal MWD

Note: Totals may not foot due to rounding.

TABLE 6

PARCELS SUBJECT TO ANNEXATION STANDBY CHARGES
AS OF JULY 1, 2021

Annexation	Parcel Number	Acres		Proposed Standby Charge (FY 2020/21)
Eastern MWD				
111th Fringe Area	910-230-003	5.82		40.39

REORGANIZATIONS BETWEEN MEMBER AGENCIES

Annexation	Parcel Number	Acres	Original Standby Charge	Proposed Standby Charge (FY 2020/21)
Reorg No. 2012-10			**West Basin MWD**	**Las Virgenes MWD**
From West Basin MWD	4438-037-003	5.27	0.00	42.32
To Las Virgenes MWD				