

DEPARTMENT OF WATER RESOURCES

# STATE WATER RESOURCES DEVELOPMENT SYSTEM An Enterprise Fund of the State of Calif

Comprehensive Annual Financial Report for the fiscal year ended June 30, 2018 (with comparative amounts for fiscal year ending June 30, 2017)



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### STATE OF CALIFORNIA

Gavin Newsom, Governor

### CALIFORNIA NATURAL RESOURCES AGENCY

Wade Crowfoot, Secretary for Natural Resources

### **DEPARTMENT OF WATER RESOURCES**

Karla Nemeth Director

Cindy Messer Chief Deputy Director

Michelle Banonis
Assistant Chief Deputy Director

### **Deputy Directors and Executives**

Joel Ledesma State Water Project

Eric Koch
Flood Management and Dam Safety

Kristopher Tjernell Integrated Watershed Management Program

Michael Sabbaghian Statewide Emergency Management Program

Gary Lippner Delta Conveyance

Katherine S. Kishaba Business Operations

Taryn Ravazzini Special Initiatives

Spencer Kenner Chief Counsel

Erin Mellon Assistant Director, Public Affairs Office

Kasey Schimke
Assistant Director, Legislative Affairs Office

Anecita Agustinez
Government and Community Liaison

### **Business Operations, Division of Fiscal Services**

Vinay Narjit Singh Behl, CPA Comptroller & Chief Financial Officer Chief, Division of Fiscal Services

This document was prepared under the direction of the Enterprise Branch of the Department's Fiscal Services Division:

Lisa Toms, Accounting Administrator III

### Enterprise Accounting Branch

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# Karla Nemeth

Karla Nemeth was appointed Director of the California Department of Water Resources by Governor Edmund G. Brown Jr. on January 10, 2018.

DWR operates and maintains the California State Water Project, manages floodwaters, monitors dam safety, conducts habitat restoration, and provides technical assistance and funding for projects for local water needs. Karla oversees the Department and its mission to manage and protect California's water resources, working with other agencies in order to benefit the State's people and to protect, restore and enhance the natural and human environments.

Karla worked at the California Natural Resources Agency as Governor Brown's Deputy Secretary and Senior Advisor for water policy since 2014. She was the Bay Delta Conservation Plan project manager from 2009 to 2014.

Karla was the environmental and public affairs director for the Alameda County Flood Control and Water Conservation District from 2005 to 2009. She was also the community affairs manager at Jones and Stokes from 2003 to 2005.

Karla has a Master's degree in public administration from the University of Washington.



### Cindy Messer CHIEF DEPUTY DIRECTOR

Cindy Messer was appointed as the Department's Chief Deputy Director in February 2017. Cindy was the Deputy Director of the Planning, Performance, and Technology Division at the Delta Stewardship Council from 2012 until her appointment with DWR. As Deputy Director, she coordinated the preparation and implementation of the Delta Plan. Prior to this position, Cindy served as the assistant executive officer for the Sacramento-San Joaquin Delta Conservancy where she provided oversight for the development of the Delta Conservancy's Interim Strategic Plan. She also worked for more than ten years in various technical and managerial roles within DWR's Division of Environmental Services.

Cindy is a graduate of the University of California, Davis, where she earned her Bachelor of Arts degree in environmental policy analysis and planning. She also obtained a Master of Science degree in conservation biology from California State University, Sacramento.



### Katherine Kishaba DEPUTY DIRECTOR, BUSINESS OPERATIONS

Katherine S. Kishaba was appointed Deputy Director of Business Operations in March 2011. Her primary responsibilities include managing the Department's fiscal, information technology, procurement, human resources, facilities, and safety programs. Business Operations consists of approximately 400 employees department-wide.

Prior to assuming her current role, Katherine served as the Department's Budget Officer, beginning in 2003, and was responsible for the development and administration of DWR's multi-billion dollar budget. Previously, Katherine also oversaw all administrative activities of DWR's Bay-Delta Office and worked in the administrative sections of DWR's former Division of Land and Right of Way and Office of Water Education (now the Public Affairs Office). She participated in the implementation and upgrade of SAP, the Department's enterprise financial system, and more recently managed the design and roll-out of the Department's Enterprise Budget Planning system in 2009.

Katherine holds both a Master of Business Administration degree from the University of California, Davis' Graduate School of Management and a Bachelor of Arts degree in Social Science from the University of California, Berkeley.



# Spencer Kenner CHIEF COUNSEL

Spencer Kenner was appointed Chief Counsel, in February 2016, overseeing the Office of Chief Counsel. He provides legal advice to the Director and Management, and oversees approximately 40 attorneys. The Office of Chief Counsel is responsible for a broad range of issues, including water rights; water transfers; energy law; flood management; integrated water management; dam safety; personnel; and state contracting.

Spencer was Assistant Chief Counsel beginning in 2013; acting Chief Deputy Director in 2015, and Senior Staff Counsel from 2008 to 2013. He served as commission counsel at the California Water Commission, staff counsel at the Employment Training Panel, and deputy general counsel at the California State Lottery. He also served as court counsel at Yolo County Superior Court, staff attorney at Empower Yolo, deputy district attorney at Yolo County District Attorney's Office, and senior associate at Downey Band LLP.

Spencer earned a Juris Doctor degree from Brigham Young University.



# Joel Ledesma DEPUTY DIRECTOR, STATE WATER PROJECT

Joel Ledesma was appointed State Water Project (SWP) Deputy Director, in July 2017, by Governor Edmund G. Brown Jr.

Joel is an electrical engineer who has worked with the Department for more than three decades and has expertise in water, energy, and project management. He served as assistant Division Chief of Operations and Maintenance, Chief of the Plant Asset Management Branch, Chief of the Delta Field Division, Chief of the Systems Support Office, and Chief of the Energy Management Systems Branch.

He's led several projects, including preparation of the initial start-up of the California Independent System operator (ISO) Corporation, Business 2000-Phase 2B, implementation of Cyber Infrastructure Protection Program for SWP, and Market Redesign Technical Upgrade project in compliance with Federal Energy Regulatory Commission and ISO regulatory and energy market requirements.

As SWP Deputy Director, Joel oversees the Division of Engineering, Delta Habitat Conservation and Conveyance Program, SWP Power and Risk Office, Hydropower License Planning and Compliance Office, SWP Analysis Office, Delta Conveyance Office, Division of Environmental Services, Bay-Delta Office, and the largest division—the Division of Operations and Maintenance, which includes five field division offices.

A native of Sacramento, Joel earned a Bachelor of Science degree in electrical engineering, with a concentration in power, from the California State University, Sacramento..



# Vinay Narjit Singh Behl, CPA COMPTROLLER & CHIEF FINANCIAL OFFICER

Vinay Narjit Singh Behl has served as the Chief of the Division of Fiscal Services since April 2017 and as such is the Comptroller and Chief Financial Officer of the Department. Vinay is also responsible for the long-term financial planning of the State Water Project and management of the outstanding debt for the Department.

Prior to joining the Department, Vinay served as Chief Financial Officer of a subsidiary of Guardian Life Insurance Corporation from 2015 through 2017; Chief Financial Officer of an operating division of the United States Department of Health & Human Services from 2010 through 2015; and Vice President of Finance having worked for multinational software companies from 1997 through 2010.

Vinay is a licensed CPA in California and Delaware with various certifications in Accounting, Audit and Finance. He holds a Bachelors and Masters in Finance and graduated with a Masters In Business Administration from University of California, Davis, specializing in mergers and acquisitions. Vinay is a Chartered Accountant; Certified Internal Auditor; Chartered Global Management Accountant; Certified Management Accountant; Certified Internal Auditor; Certified Fraud Examiner; Certified in Finance Qualification; Certified Government Audit Professional; Certified Government Finance Manager; Certified in International Financial Reporting Standards; Certified Information Systems Auditor; and Certified Information Technology Professional.



# Lisa Toms CHIEF, ENTERPRISE ACCOUNTING BRANCH

Lisa Toms has served as Chief of the Enterprise Accounting Branch, within the Division of Fiscal Services, since March 2014. She has over 27 years of financial experience at the Department of Water Resources and has served in many leadership roles within the Division of Fiscal Services.

She oversees the reporting of the State Water Resources Development System's financial records, including the preparation of the Comprehensive Annual Financial Report, as well as ensures adequate financing needs are met for all State Water Project funding needs, including the issuance of Commercial Paper and Central Valley Project (CVP) Water System Revenue bonds.

Her institutional knowledge of the Department and many years of State Water Project experience has allowed her to become one of the key financial representatives of the Department.

Lisa received her Bachelor's Degree in Business Administration, with a concentration in Accounting, from the California State University, Sacramento.

### Behl, continued

He is also a graduate of the prestigious Strategic Leadership program for Healthcare Executives from Cornell University. In addition, Vinay has held official positions as an advisory board member on the Performance and Accountability committee composed of eight members selected nationwide of American Institute of Certified Public Accountants (AICPA) tasked with recommending performance improvements and governance in large organizations.

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	An aerial view of the Lake Oroville Main Spillway Control Struc	



# INTRODUCTORY SECTION

The construction phase of Oroville Diversion Tunnel No. 1 at the Butte County damsite, August 1963.





March 26, 2019

To the Citizens of the State of California:

We are pleased to present the Comprehensive Annual Financial Report (CAFR) of the State Water Resources Development System ("the System") for the fiscal year ended June 30, 2018, with comparative amounts for fiscal year ended June 30, 2017, along with the Independent Auditors' Report. The CAFR has been prepared by the California Department of Water Resources (DWR) in conformance with the principles and standards for financial reporting set forth by the Governmental Accounting Standards Board (GASB). Responsibility for both the accuracy of the data and the completeness and fairness of the presentation, including all disclosures, rests with DWR management. We believe that the data, as presented, is accurate in all material respects; that its presentation fairly shows the financial position and the results of the System's operations as measured by the financial activity of its various funds; and that the included disclosures will provide the reader with an understanding of the System's financial affairs.

This CAFR was prepared using the financial reporting requirements as prescribed by the GASB Statement No. 34, *Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments* (GASB 34), as amended. This GASB Statement requires that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of a Management's Discussion & Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The MD&A can be found immediately following the report of the independent auditors.

# The Reporting Entity and Its Services

### **REPORTING ENTITY**

The System operates as an Enterprise fund of the State of California administered by the California Department of Water Resources (DWR)1. DWR operates within the Natural Resources Agency of the State of California, and is responsible for the planning, construction, and operation of the System. The System includes the State Water Project (SWP), the Davis-Grunsky Act Program, and the San Joaquin Drainage Implementation Program.

DWR was established in 1956 by an act of the State Legislature that combined the functions of the Water Project Authority and certain responsibilities of the Department of Public Works' former Division of Water Resources. At present, DWR employs 3,174 full-time staff throughout the State, of which approximately 2,136 are allocated to the System. The

<sup>1</sup> See the accompanying MD&A for more on Enterprise Funds

Director of DWR oversees the Department's activities, with the assistance of a Chief Deputy Director and eight Deputy Directors. The Director, Chief Deputy Director, Deputy Director for the State Water Project, and Chief Counsel are each appointed by the Governor.

On August 30, 2018, Karla Nemeth was officially confirmed by the Governor of California as the Director of DWR.

DWR's operations, with respect to the SWP, are accounted for and conducted under Segments<sup>2</sup> consisting of special funds established by the California Water Code. These Segments are (a) the State Water Resources Development Bond Fund (Bond Fund), which was formed when the voters of the State of California passed the Burns-Porter Act in 1960; and (b) the Central Valley Project Construction Fund (Construction Fund) and the Central Valley Project Revenue Fund (Revenue Fund), which were enabled under California's Central Valley Project Act of 1933.

DWR's operations, with respect to the System, are separate and apart from DWR's operations that are primarily funded by State General Fund appropriations and from DWR's Power Supply Program.

### **SERVICES**

The System encompasses dams, reservoirs, pumping plants, power plants, aqueducts, and pipelines owned<sup>3</sup> and operated by the State of California. The System was developed in order to deliver water to areas of need, throughout the State, for domestic, industrial, and agricultural purposes, as well as to provide flood control, recreation, fish and wildlife enhancement, hydroelectric power, and other benefits. DWR is responsible for the planning, construction, and operation of the System. All 647 miles of the initially planned aqueduct system have been completed. The 444-mile main stem of the California Aqueduct runs from a point near Stockton southward to a terminus in Riverside County. The dependable annual water supply available for delivery by the existing System varies yearly depending on hydrologic conditions and regulatory mandates.

### **JOINT-USE FACILITIES**

Portions of the System consist of facilities developed and used jointly with the Federal Central Valley Water Project (FCVP) operated by the U.S. Bureau of Reclamation (USBR). In addition, both projects have primary sources of water north of the Sacramento-San Joaquin Delta (Delta), transport water across the Delta and draw water from the southern edge of the Delta. The FCVP, like the System, provides water for irrigation in the Central Valley, urban water supply, water quality, flood control, power, recreation, and fish and wildlife enhancement. Capital costs, for the jointly developed facilities, are shared approximately 55 percent State and 45 percent Federal.

In 1986, the System and USBR entered into a Coordinated Operation Agreement (COA) under which the System and the FCVP coordinate operations, including releases from upstream reservoirs and pumping from the Delta. The COA permits increase operational efficiency of both projects, ensures that each project receives an equitable share of available surplus water and provides for sharing of responsibilities in meeting certain Delta water quality standards.

<sup>2</sup> See the accompanying MD&A for more on the System's Segments

<sup>3</sup> Certain assets are owned jointly by the State and the United States Bureau of Reclamation. See Joint-Use Facilities

### THE WATER SUPPLY CONTRACTS

DWR has entered into Water Supply Contracts with 29 local public agencies (Water Contractors), which provide for DWR to recover substantially all System costs. The Water Contractors are principally located in the San Francisco Bay Area, the Central Coast, the Central Valley, and Southern California, and their service areas encompass approximately 25 percent of the State's land area and approximately 69 percent of its population.

Payments by the Water Contractors under the Water Supply Contracts provide for the operation, maintenance, planning, and capital costs, including interest, of the SWP. The Water Contractors may request up to a maximum annual aggregate amount totaling 4,172,786 acre-feet of water from the System. This maximum does not assure delivery of that amount of water, but rather provides the basis for proportional allocation of available supplies and certain costs among the Water Contractors.

Generally, the existing Water Supply Contracts are to remain in effect until 2035 or until all bonds issued to finance construction costs of SWP facilities have been repaid (currently fiscal 2036), whichever period is longer. Under its Water Supply Contract, each Water Contractor may request water deliveries from the SWP up to a maximum specified annual amount, and agrees to pay its allocated share of the costs of gathering, storing, conveying, and delivering water. Generally, DWR's costs of providing the facilities of the SWP, including interest, are payable by the Water Contractors whether or not water is delivered. If a Water Contractor defaults under their Water Supply Contract, DWR may, upon six months' notice, suspend water deliveries to that Water Contractor. During such period, the Water Contractor remains obligated to make all payments required by the Water Supply Contract. If a Water Contractor fails or is unable to raise sufficient funds, by other means, to make contract payments, the Water Contractor is required, by the contract, to levy a tax or assessment sufficient for such purpose.

DWR and the affected Water Contractors have entered into an Off-Aqueduct Power Facilities Amendment, East Branch Enlargement Amendment, Water System Revenue Bond Amendment, Coastal Branch Extension Amendment, East Branch Extension Amendment, and a South Bay Aqueduct Enlargement Amendment to the Water Supply Contracts for the purpose of financing certain Water System Projects. These Amendments established procedures to provide for the payment of construction costs financed with Revenue Bonds by establishing separate subcategories of charges to produce the revenues required to pay all of the annual financing costs, including coverage, of the Bonds allocable to such Amendment Projects. If any Water Contractor defaults on payment under any of these Amendments, other than the Coastal Branch Extension Amendment, East Branch Extension Amendment, and the South Bay Aqueduct Enlargement Amendment, the shortfall may be collected from non-defaulting affected Water Contractors, subject to certain limitations.

In December 1994, representatives of DWR and certain Water Contractors adopted a set of principles pursuant to which additional amendments to the Water Supply Contracts have since been negotiated. This amendment is known as the "Monterey Amendment." The Monterey Amendment includes provision relating to the allocation of water, the transfer of the land and related assets of the Kern Fan Element, the operation of certain SWP reservoirs, transfers of the annual Table A amounts, other water transfers, the creation of and limitations on a Department reserve for operation, maintenance and replacement costs, and the description of facilities that may be financed with revenue bonds. In addition, the Monterey Amendment provides for the reduction of annual Water Supply Contract charges.

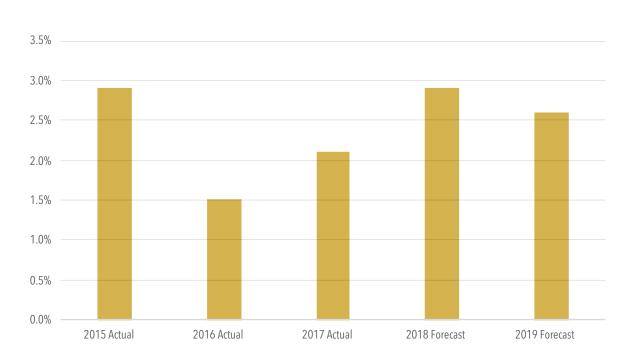
# **Economic Outlook**

### A MACROECONOMIC VIEW

Department day-to-day operations are not significantly impacted by normal fluctuations in global or national economic conditions. However, macroeconomic trends can affect market interest rates and energy costs, which in turn can impact investment income earned on financial assets, borrowing costs, and water transportation costs. Significant changes in economic conditions also can affect the availability and cost of bank credit products and other sources of capital relied on by the Department from time to time.

U.S. economic growth picked up in the 2nd quarter, with real GDP growing by 4.2%, the highest reading since 2011. Gradual monetary policy normalization is set to continue, but tax reductions and higher government expenditure are providing a substantial short-term boost to domestic demand, adding to the impetus from solid job creation, strong asset prices and record levels of oil production. Higher tariffs and uncertainty about future policies are, however, likely to moderate investment growth, and growth is likely to decline going forward, with current forecasts calling for U.S. Real GDP growth of about 2.6% in calendar year 2019. As of June 2018, the median forecasted probability of a recession in the next 12 months was 17%.4



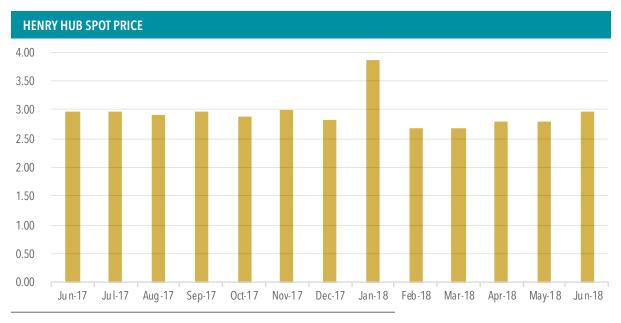


4 Source: US Conference Board

The Bloomberg Economist weighted average forecast yields for 2-year, 10-year and 30-year U.S. Treasury bonds for the 4th quarter of 2019 are 3.28%, 3.45% and 3.70%, respectively. The Fed Funds rate is forecast to rise to 3.15%. These forecasts represent increases of about 0.40% to 0.90% from current levels.<sup>5</sup>



In energy markets, the Henry Hub natural gas spot price averaged \$2.93 per million British thermal units (MMBtu) during fiscal year 2018. It is forecast to average \$2.98 per MMBtu in calendar year 2019, with strong growth in U.S. natural gas production.<sup>6</sup>



<sup>5</sup> Source: The Bloomberg Economist

<sup>6</sup> Source: US Energy Information Administration

### **CALIFORNIA ECONOMY**

According to the UCLA Anderson School of Management June 2018 Outlook, the California economy expanded as expected in the first half of calendar year 2018. In June 2018, the unemployment rate held steady at 4.2%, compared with 4.7% in June 2017. The June 2018 unemployment rate was 0.2% higher than the national unemployment rate of 4.0%. The UCLA Anderson forecast anticipates that California's average unemployment rate will remain higher than the U.S. rate and be at 4.3% in 2020, a consequence of a younger and more entrepreneurial workforce. UCLA Anderson projects total employment growth for 2019 of 1.8%, with payrolls growing at about the same rate. In the first quarter of 2018, California's personal income grew 4.5%, versus growth in U.S. personal income of 3.6%. UCLA Anderson forecasts real California personal income growth to be 2.5% and 3.6% percent in calendar years 2018 and 2019, respectively. In fiscal year 2018, California's all urban consumer annualized price inflation was 3.9%, compared with 2.6% for fiscal year 2017. California's median home price hit an all-time high in May 2018 of \$600,860, up 9.2% from May 2017.

The State reported that Preliminary General Fund agency cash for June 2018 exceeded the 2018-19 Budget Act forecast of \$17.773 billion by about \$1.601 billion and fiscal year 2017-18 revenues were \$1.541 billion higher than the forecast of \$134.502 billion.8

### **INTEREST RATES**

Long-term tax-exempt interest rates have risen over the last year. As of June 30, 2018, the 20-year "AAA" tax-exempt borrowing rate was approximately 2.82%, versus 2.65% as of June 30, 2017. Variable rate tax-exempt rates have also risen since last summer as the Federal reserve has continued to tighten monetary conditions. As of June 30, 2018, variable rate tax-exempt rates were 1.51%, versus 0.91% a year earlier.9

In December of 2017, the Department sold its tax-exempt \$350,670,000 Central Valley Project Water System Revenue Bonds, Series AX with a final maturity of 2035, a weighted average maturity of 8.6 years and an average borrowing cost of 2.26%. At the same time, the Department sold \$140,825,000 in taxable Central Valley Project Water System Revenue Bonds, Series AY with a final maturity of 2029, a weighted average maturity of 7.5 years and an average borrowing cost of 2.90%.

<sup>7</sup> Source: UCLA Anderson School of Management Forecasts

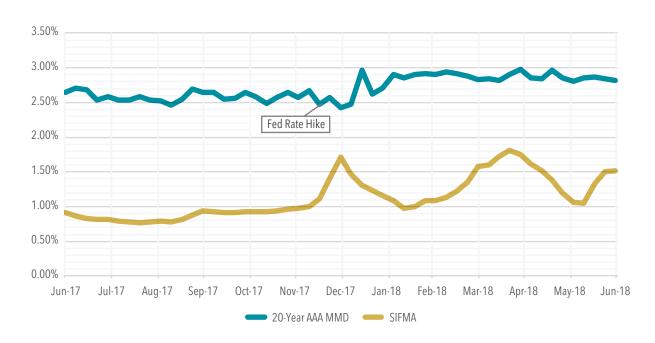
<sup>8</sup> Source: State of California Department of Finance

<sup>9</sup> Source: Thompson-Reuters TM3

### **10-YEAR HISTORY OF SHORT AND LONG TERM INTEREST RATES**



### 1-YEAR HISTORY OF SHORT AND LONG TERM INTEREST RATES



# State Water Project

### STATE WATER PROJECT CAPITAL PROJECTS

Since the State Water Project began construction in 1960, its original scope has been modified and expanded to address the needs of the growing population as well as commercial, industrial and agricultural demands for water in California. The following table shows the projects that have been undertaken as part of the State Water Project and the amounts that have been spent, as of October 10, 2018, for each project and each's project's estimated future capital expenditures.

### ESTIMATED CAPITAL FINANCING FROM WATER SYSTEM REVENUE BONDS FOR EXISTING WATER SYSTEM PROJECTS(1) (in Millions)

Water System Project	Capital Expenditures To Date	<b>Estimated Future Capital Expenditures</b>	Total Capital Expenditures
Power plants:			
Small Hydro Project	\$46.6	\$0.0	\$46.6
Pyramid Hydroelectric Project	74.4	0.0	74.4
Alamo Project	30.4	0.0	30.4
Bottle Rock Facilities <sup>(2)</sup>	80.2	0.0	80.2
South Geysers Project <sup>(3)</sup>	40.9	0.0	40.9
Reid Gardner Project <sup>(4)</sup>	176.2	0.0	176.2
East Branch Enlargement – Phase I	453.0	0.0	453.0
Additional East Branch Improvements	124.1	0.0	124.1
East Branch Enlargement – Phase II	7.9	0.2	8.1
Delta Pumping Plant Completion	73.6	0.0	73.6
Suisun Marsh Environmental Facilities	37.2	0.0	37.2
San Bernardino Tunnel Intake Structure	29.3	0.0	29.3
San Luis Rock Quarry	4.5	0.0	4.5
Castle Rock-Lakeville Transmission Line	6.9	0.0	6.9
Midway-Wheeler Ridge Transmission Line	10.1	0.0	10.1
Kern Water Bank	37.0	0.0	37.0
Vista del Lago Visitor Center	9.0	0.0	9.0
North Bay Aqueduct-Phase II	87.1	0.0	87.1
North Bay Aqueduct Improvements – Terminal Tanks	7.4	6.1(6)	13.5
North Bay Aqueduct Alternate Intake	0.0	545.0	545.0
Project Monitor and Control System	71.5	0.0	71.5
SWP Communications System Replacement (5)	36.4	0.9	37.3
Arroyo Pasajero Program	6.3	0.1	6.4
Hyatt Pump-Turbine Refurbishment	17.9	4.6(6)	22.5
Edmonston Pump Replacement <sup>(5)</sup>	24.2	14.9(6)	39.1
Delta Facilities Program	230.3	423.4	653.6
Tehachapi East Afterbay <sup>(5)</sup>	70.2	11.8	82.0
Perris Dam Remediation (5)	121.3	97.1	218.4
Thermalito Powerplant Cleanup and Reconstruction (7)	219.1	14.0	233.1
Oroville Dam Spillway Response, Recovery and Restoration (7)	45.0	490.8	535.8
Oroville Dam Safety Comprehensive Needs Assessment (7)	0.0	25.0	25.0
FERC Relicensing – State Water Project (7)	21.6	78.4	100.0
Facilities Reconstruction and Improvement Project	523.2	614.7	1,137.9
Project Planning Costs	112.8	36.2	149.0
Coastal Branch – Phase II	491.3	0.0	491.3
East Branch Extension – Phase I	126.0	0.0	126.0
East Branch Extension – Phase I Improvements (5)	38.6	0.8(6)	39.4
East Branch Extension – Phase II (5)	270.3	0.0	271.4
South Bay Aqueduct Enlargement and Improvement (5)	268.8	0.0	269.9
Total Water System Projects <sup>(8)</sup>	\$4,030.5	\$2,366.1	\$6,396.6

<sup>(1)</sup> The projections contained in this table have been prepared by the Department's management for management purposes on the basis of certain assumptions, and consistent with certain requirements of the Water Supply Contracts. The projections are the responsibility of the Department.

<sup>(2)</sup> Sold by the Department in 2001.

<sup>(3)</sup> Sold by the Department in 2004.
(4) The Department's ownership interest terminated in 2013.

<sup>(5)</sup> The original Bond Anticipation Bonds ("BABs") for Esat Branch Extension - Phase I Improvements and East Branch Extension Phase II exceeded the projected expenditures. \$44.5 million of the proceeds of the Series AE refunding of the BABs was redistributed from East Branch Extension - Phase I Improvements and East Branch Extension - Phase II to Communications System Replacement, Edmonston Pump Replacement Tehachapi East Afterbay, Perris Dam Remediation, and South Bay Aqueduct Enlargement.

(6) Projects are completed. Amounts are treated as "Estimated Future Capital Expenditures" pending reallocation.

(7) These projects are each a project authorized under the Resolution as part of the Facilities Reconstruction and Improvement Project, the Department has decided to show these projects

individually due to the estimated aggregate principal amount.

<sup>(8)</sup> Totals may not sum due to rounding.

### STATE WATER PROJECT DEBT PROFILE

The Department currently has \$3.56 billion of total debt outstanding. These amounts include revenue bonds, general obligation bonds, commercial paper, and Surplus Money Investment Fund loan. The debt has a final maturity of December 1, 2035. The State Water Contractors are responsible for the payment of debt service on the bonds and are billed annually for their share of the debt obligation. The Department has generally structured each new money issuance of bonds with level annual debt service payments. However, from 2018 to the final maturity of the Department's bonds in 2035, annual debt service payments will gradually decline from approximately \$275 million to approximately \$130 million.



### STATE WATER PROJECT CREDIT RATINGS

The Department's Water System Revenue Bond credit is rated AAA (highest possible rating) by Standard & Poor's and Aa1 (second to highest possible rating) by Moody's Investor's Service. The Water System Revenue Bond credit rating is not tied to or impacted by the State of California's general obligation bond ratings or the Department's \$11 billion in Power Supply Revenue Bonds sold in 2002 to finance power for the state's investor owned utilities during the 2000-2001 energy crisis are rated separately.

### **OROVILLE DAM SPILLWAY EMERGENCY REPAIRS**

Record rainfall in early February 2017 caused extensive damage to the spillways at the State Water Project's Oroville Dam. In May 2017, the Department implemented a \$500 million short-term borrowing program to fund repairs to the spillways and other related facility repair costs. In January 2018, the program was increased to \$800 million. The Department expects FEMA reimbursement for up to 75% of eligible repair costs. Once all FEMA reimbursement has been received and applied to reduce the short-term borrowing program, any remaining short-term debt related to the Oroville Dam Spillway repairs is expected to be refinanced with long-term bonds. The State Water Contractors will be

responsible for the debt service on these bonds and will bill customers accordingly. Through June 2018, \$555.8 million of short-term borrowing has been incurred for Oroville Dam Spillway repairs.

# State Water Contractors

### **CONTRACTOR SHARE OF PAYMENTS**

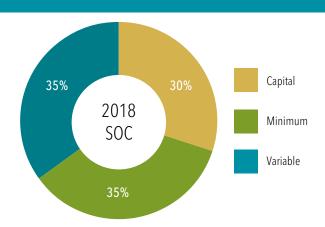
The State Water Contractors are billed each July for projected operating and capital costs for the upcoming calendar year. These Annual Statements of Charges (SOC) include three types of charges:

- Capital (Repay Construction, Major Replacement/Refurbishment Costs)
- Minimum (Repay O&M and Non-Capital Replacement Costs)
- Variable (Repay Power Costs)

The capital, minimum and variable charges are applied in the following five main areas:

- Transportation Capital, Minimum, Variable
- Conservation Capital & Minimum
- Off-Aqueduct Power Facilities
- Water System Revenue Bond Surcharge
- Separate Bond Charges (East Branch Enlargement, East Branch Extension, Coastal Branch Extension, South Bay Aqueduct Enlargement, RAS)

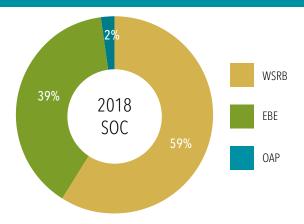
### TRANSPORTATION CHARGES



### **CONSERVATION CHARGES**



### **OFF AQUEDUCT POWER FACILITY CHARGES**



The 29 State Water Contractors pay for the costs of the State Water Project through a combination of monthly and semiannual charges. In 2018, seven of the Water Contractors have accounted for more than 84 percent of water system revenues.

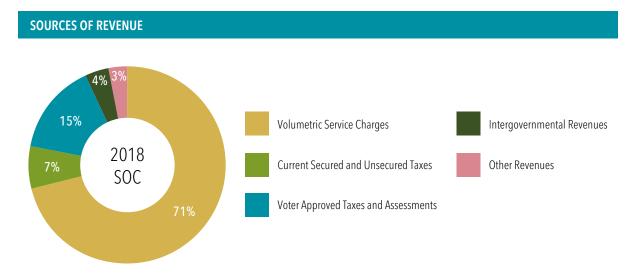
### **REVENUE COLLECTED BY THE DEPARTMENT** 2018 SOC Rank **Water Supply Contractors** Percent The Metropolitan Water District 563,745,764 50% 2 Kern County Water Agency 131,042,241 12% Coachella Valley WD 65,006,294 3 6% San Bernardino Valley MWD 54,858,884 4 5% Santa Barbara County FC&WCD 42,150,886 5 4% 2018 Alameda County FC&WCD, Zone 7 38,531,248 6 3% SOC Antelope Valley-East Kern WA 35,055,233 3% 7 8 Santa Clara Valley Water District 24,493,300 2% 9 Castaic Lake Water Agency 24,331,140 2% Mojave Water Agency 24,054,254 10 2% Desert Water Agency 22,328,726 11 2% 20,952,660 San Gorgonio Pass WA 12 2% Solano County Water Agency 10,801,312 13 1% 14 1% San Gabriel Valley MWD 10,183,965 Tulare Lake Basin WSD 10,044,427 15 1% Napa County FC&WCD 8,475,838 1% 16 Alameda County Water District 7,503,209 17 1% San Luis Obispo County FC&WCD 5,762,428 18 1% **Dudley Ridge Water District** 5,230,861 19 0% Palmdale Water District 20 0% 4,805,290 Ventura County WPD 4,494,008 21 0% 22 0% County of Butte 2,101,740 Crestline-Lake Arrowhead WA 1,135,028 23 0% County of Kings 1,097,715 24 0% City of Yuba City 565,720 25 0% Oak Flat Water District 537,098 0% 26 Empire West Side ID 354,211 27 0% Littlerock Creek ID 338,468 0% Plumas County FC&WCD 238,360 29 0%

The percentage of total revenue collected by the Department from each Water Contractor varies significantly from the percentage of water the Water Contractor may be eligible to receive based on what is referred to as Table A. Table A is contained in the Long-Term Water Supply Contracts executed by the Department with each of the 29 State Water Contractors and details the maximum amount of water that each Water Contractor is entitled to request from the Department. The Water Contractors make their requests by October 1 for water to be delivered in the upcoming calendar year. Below are the Table A shares of water each Water Agency may request. Municipal and Industrial Contractors represent 76% of the Water Contractors' share of the Table A water supply, while Agricultural Contractors represent 24%.

Total State Water Project \$ 1,120,220,308

UPPER FEATHER RIVER		
County of Butte		27,500
Plumas County Flood Control & Water Conservation District		2,700
City of Yuba		9,600
,	Subtotal	39,800
NORTH BAY AREA		
Napa County Flood Control & Water Conservation District		29,025
Solano County Water Agency		47,756
	Subtotal	76,781
SOUTH BAY AREA		
Alameda County Flood Control & Water Conservation District, Zone 7		80,619
Alameda County Water District		42,000
Santa Clara Valley Water District		100,000
	Subtotal	222,619
SAN JOAQUIN VALLEY		
Oak Flat Water District		5,700
County of Kings		9,305
Dudley Ridge Water District		45,350
Empire West Side Irrigation District		3,000
Kern County Water Agency		982,730
Tulare Lake Basin Water Storage District		87,471
	Subtotal	1,133,556
CENTRAL COAST		
San Luis Obispo County Flood Control & Water Conservation District		25,000
Santa Barbara County Flood Control & Water Conservation District		45,486
	Subtotal	70,486
SOUTHERN CALIFORNIA		
Antelope Valley-East Kern Water Agency		144,844
Castaic Lake Water Agency		95,200
Coachella Valley Water District		138,350
Crestline-Lake Arrowhead Water Agency		5,800
Desert Water Agency		55,750
Littlerock Creek Irrigation District		2,300
The Metropolitan Water District of Southern California		1,911,500
Mojave Water Agency		85,800
Palmdale Water District		21,300
San Bernardino Valley Municipal Water District		102,600
San Gabriel Valley Municipal Water District		28,800
San Gorgonio Pass Water Agency		17,300
Ventura County Watershed Protection District		20,000
	Subtotal	2,629,544
	Total State Water Project	4,172,786

72% of the revenues collected by the Water Contractors for the payment of State Water Project charges are based on volumetric service charges. Other sources include property taxes, assessments, intergovernmental revenues, and other revenues.



# Major Initiatives and Achievements

### WATER SUPPLY CONTRACT EXTENSION

In May 2013, DWR and the Water Contractors began negotiations in a public forum to develop contract amendments to extend the term and change certain financial provisions of the Water Supply Contracts. In June 2014, the negotiators for DWR and the Water Contractors reached a general agreement on principles for such an amendment. DWR and 25 of the 29 Contractors have signed the Agreement in Principle (AIP). The County of Butte, Plumas County Flood Control and Water Conservation District, San Luis Obispo Flood Control and Water Conservation District, and the Santa Barbara Flood Control and Water Conservation District have not signed the AIP.

Currently, subject to individual elections for continued service by each Water Contractor, the Water Supply Contracts are to remain in effect for the longest of 75 years, December 31, 2035, or until all bonds issued to finance construction costs of SWP facilities have been repaid, whichever period is longest. No Bonds have been sold with a maturity date later than December 1, 2035. The 75-year term provision currently results in the Water Supply Contracts having varying termination dates that range between December 31, 2035 and 2042, subject to the aforementioned election.

A proposed contract extension amendment has now been prepared based on the AIP. Under the proposed amendment, the term of the Water Supply Contract for each Water Contractor that signs the amendment would be extended until December 31, 2085. Also under the proposed amendment, certain provisions that provide for charges to the Water Contractors for capital costs and certain other costs, currently made on an amortized basis, would be amended to provide for charges to the Contractors on an annual "pay-as-you-go" basis to provide the revenues needed by DWR to make payments each year. The current provisions authorizing DWR to charge the Water Contractors annually for the full amount of the required annual debt service and coverage on the Bonds will continue in any extended contract.

Other provisions addressed in the proposed amendment would provide for, among other things, an increase in DWR's operating reserves; a mechanism for financing capital projects, using System funds, and recovering those costs with interest from the Water Contractors; establishment of an account to pay for certain System expenses not chargeable to the Water Contractors; and the establishment of a Finance Committee consisting of DWR and Water Contractor representatives to serve as a forum for discussions and to provide a channel for recommendations to the Director of DWR concerning financial policies of the System.

As required by statute, on September 11, 2018, DWR presented the terms of the proposed amendment in an informational hearing to the Legislature's Joint Legislative Budget Committee. With regard to the required environmental review pursuant to the California Environmental Quality Act (CEQA), in August 2016, DWR released, for public comment, a draft Environmental Impact Report (EIR) for the proposed contract extension amendment. The public comment period on the draft EIR closed in October 2016 and DWR is in the process of preparing a final EIR. Any amendment that is ultimately adopted will comply with DWR's covenant in the General Bond Resolution not to agree to any amendment to the Water Supply Contracts, which would materially adversely affect the security for the Bonds.

### **RENEWABLE ENERGY**

The System plans to procure approximately 920 gigawatt of renewable energy by 2025. Purchase agreements for such power include:

- A 20-year contract with RE Camelot Solar Photovoltaic Project<sup>10</sup> for the purchase of 45 megawatt (MW) of solar photovoltaic energy and associated capacity bundled with Renewable Energy Credits from their facility located in southeastern Kern County. The RE Camelot Plant is expected to deliver 125,000 MW of annual generation.
- A 20-year contract for 85 MW from Solverde 1, LLC whose facility, built near Lancaster in northern Los Angeles County, is expected to deliver 230,000 MW of annual generation.
- A 20-year contract for 9.5 MW with Solar Star California XLIV, LLC for a facility built at the Pearblossom power plant. This Pearblossom facility includes an additional 10-year option to extend and is expected to deliver 27,400 MW of annual generation.

# Other Financial Information

### **INTERNAL CONTROLS**

In developing and evaluating the System's accounting system, consideration is given to the adequacy of internal accounting controls. Internal accounting controls are designed to provide reasonable, but not absolute, assurance regarding the safeguarding of assets against loss from unauthorized use or disposition, and the reliability of financial records for preparing financial statements and maintaining accountability for assets. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits likely to be derived, and the evaluation of

<sup>10</sup> Owned and operated by Dominion Solar Holdings, Inc.

costs and benefits requires estimates and judgments by management. We believe that the System's internal accounting controls adequately safeguard assets and provide reasonable assurance of proper recording of financial transactions.

# Independent Audit

The System requires an annual audit of its financial records. These records, represented in the CAFR, have been audited with an unmodified opinion by a certified public accounting firm, Vavrinek, Trine, Day & Co., LLP. The Independent Auditors' Report on our current financial statements is presented in the Financial Section.

# Awards and Acknowledgments

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the System for its CAFR for the fiscal year ended June 30, 2017. This was the second consecutive year that the System has achieved this prestigious award. In order to be awarded a Certificate of Achievement, the System published an easily readable and efficiently organized CAFR. This report satisfies both Generally Accepted Accounting Principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. We believe that our current CAFR continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

We would like to express our appreciation to the entire staff of the Fiscal Services Division and the State Water Project Analysis Office, whose professionalism, dedication, and efficiency are responsible for the preparation of this report. We would also like to thank Vavrinek, Trine, Day & Co., LLP for their invaluable professional support in the preparation of the CAFR.

Respectfully submitted,

Joel Ledesma

**SWP Deputy Director** 

Vinay Narjit Singh Behl, CPA

Comptroller & Chief Financial Officer Chief, Division of Fiscal Services

Lisa Toms

Accounting Administrator III





Government Finance Officers Association

# Certificate of Achievement for Excellence in Financial Reporting

Presented to

# California State Water Resources Development System

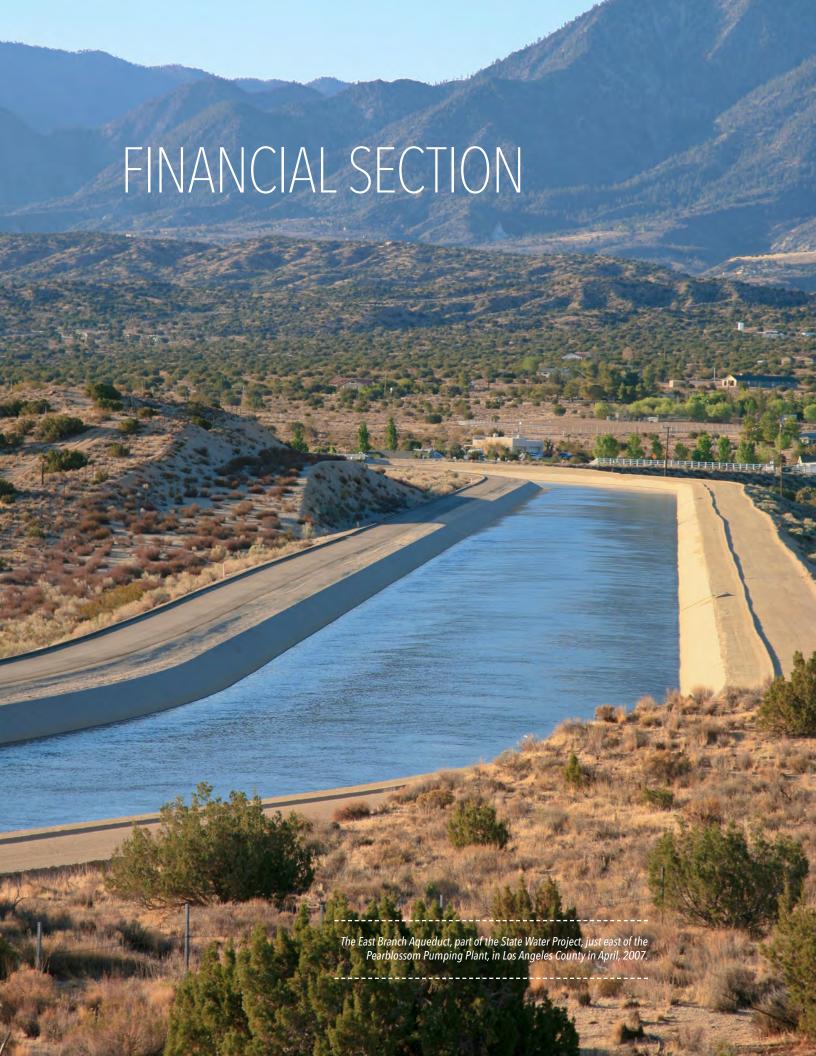
For its Comprehensive Annual Financial Report for the Fiscal Year Ended

June 30, 2017

Christopher P. Morrill

Executive Director/CEO











### INDEPENDENT AUDITORS' REPORT

To the Director of the State of California Department of Water Resources Sacramento, California

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the State Water Resources Development System (System), an enterprise fund of the State of California, as of and for the year ended June 30, 2018, and the related notes to the financial statements, as listed in the table of contents.

### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

2151 River Plaza Dr., Suite 308, Sacramento, CA 95833 P 916.570.1880 F 916.570.1875 W vtdcpa.com

### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the System as of June 30, 2018, and the changes in financial position, and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### **Emphasis of Matters**

### Reporting Entity

As disclosed in Note 1, the financial statements present only the System and do not purport to, and do not, present fairly the financial position of the State of California as of June 30, 2018, and the changes in its financial positions, or where applicable, its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

### Change in Accounting Principles

As disclosed in Note 14 to the financial statements, the System implemented GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, effective July 1, 2017. Our opinion is not modified with respect to this matter.

### **Other Matters**

### Report on Summarized Comparative Information

Other auditors have previously audited the System's 2017 financial statements, and they expressed an unmodified audit opinion on those audited financial statements in their report dated January 10, 2018.

### Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of the System's proportionate share of the net pension liability, schedule of the System's pension contributions, schedule of the System's proportionate share of the net other-post employment benefits (OPEB) liability, and the schedule of the System's OPEB contributions, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the System's basic financial statements. The introductory section, calculation of the adequacy of debt service coverage for the Central Valley Project revenue bonds, and statistical section, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The calculation of the adequacy of debt service coverage for the Central Valley Project revenue bonds are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the calculation of the adequacy of debt service coverage for the Central Valley Project revenue bonds are fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

#### Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated March 26, 2019, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

Vavrinik, Trine, Day e Co. UP Sacramento, California March 26, 2019



# MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

### Management's Discussion and Analysis

(Required Supplementary Information)

This discussion and analysis is designed to assist the reader in focusing on significant financial issues and activities for the fiscal year ended June 30, 2018, and to identify any significant changes in the financial position of the State Water Resources Development System (System), which is administered by the California Department of Water Resources (DWR). Readers are encouraged to consider the information presented in conjunction with the financial statements as a whole, which follow Management's Discussion and Analysis. This discussion and analysis and the financial statements do not relate to DWR's other governmental and proprietary funds. The System includes the State Water Project (SWP), the Davis-Grunsky Act Program, and the San Joaquin Drainage Implementation Program.

### Financial Highlights

- During fiscal 2018, the System recorded an increase in total assets of \$1,213 million on total operating revenues of \$1,207 million. However, this did not cause an increase in net position because of the deferral of timing differences in revenues collected and expenses incurred.
- Deferred inflows of resources for capital costs increased by \$153 million to an ending balance of \$1,105 million in fiscal 2018 compared to \$952 million in fiscal 2017. The increase is primarily due to net revenues collected for principal payments of previous costs incurred to construct Utility Plant in Service (UPIS) assets.
- On August 3, 2017, the System remarketed its Central Valley Project (CVP) Water System Revenue variable rate bonds Series AT and AU with par amounts of \$149.2 million and \$109.3 million, respectively. This resulted in the weighted average interest rate for both series decreased 0.13% from 0.44% to 0.31%, and the weighted average remarketing term increased from 2.6 years to 4.5 years.
- On August 29, 2017, the System received an \$18.6 million FEMA disaster grant, included in other revenues, to reimburse the System for costs associated with the Oroville Dam Spillway Recovery and Restoration Project.

- On November 21, 2017, the System received an additional \$50.4 million FEMA disaster grant, included in other revenues, to reimburse the System for costs associated with the Oroville Dam Spillway Recovery and Restoration Project.
- On December 19, 2017, the System issued its CVP Water System Revenue Bonds Series AX (Tax-Exempt) and its CVP Water System Revenue Bonds Series AY (Federally Taxable) with par amounts of \$350.7 million and \$140.8 million, respectively, and to advance refund portions of Series AE, AF, AG, AH, AI, AK, AN, AO, AP, AQ, and AR. The Series AX was issued with a premium of \$71.5 million and the Series AY was issued at par. The Series AX and AY Bonds were issued using a fixed rate structure and the final maturity of these bonds will be in 2035.

### Overview of Financial Statements

This discussion and analysis is intended to serve as an introduction to the System's basic financial statements. The System's basic financial statements are comprised of three components: 1) Financial Statements, 2) Notes to the Financial Statements, and 3) Other Information.

#### **FINANCIAL STATEMENTS**

The System is accounted for as an enterprise fund. Enterprise funds account for the acquisition, operation and maintenance of governmental facilities and services that are entirely or predominantly self-supported by user charges. These financial statements report information using accounting methods similar (although not identical) to those used by private sector companies. The Statement of Net Position includes all the assets, liabilities, deferred outflows and inflows of resources, and net position. The Statement of Revenues, Expenses and Changes in Net Position reports all of the revenues and expenses incurred during the fiscal year presented. The Statement of Cash Flows reports the cash inflows and outflows classified by operating, investing, noncapital financing, and capital and related financing activities during the reporting period presented.

The Financial Statements can be found on pages 41-47 of this report.

#### **NOTES TO THE FINANCIAL STATEMENTS**

The notes to the financial statements communicate certain information required by Generally Accepted Accounting Principles (GAAP). The notes to the financial statements can be found on pages 49-99 of this report.

#### REQUIRED SUPPLEMENTARY INFORMATION AND OTHER INFORMATION

In addition to the basic financial statements and accompanying notes, this report also presents certain supplementary information related to the pension and other postemployment benefits plans and certain supplementary information concerning the System's adequacy of debt service coverage. Supplementary information can be found on pages 101-103 of this report.

### Financial Analysis

The SWP is considered a regulated entity, as such, rates are permitted to be set at levels intended to recover the estimated costs of providing regulated services or products, including the cost of capital. If revenues intended to cover some costs are provided before costs are incurred, those revenues are reported as deferred inflows of resources and recognized as revenue when the associated costs are incurred. If regulation provides assurance that incurred costs will be recovered in the future, those costs are capitalized as receivables and recovered through future billings. As a result, net position does not change over time. The total net position of the System exceeded liabilities and deferred inflows of resources at June 30, 2018 and 2017 by \$1,205.4 million each year.

Condensed Statements of Net Position								
		June 30,						
	2018	2017	2016	% Change 2018-2017	% Change 2017-2016			
	(amounts in thousands)							
Assets:								
Other assets	\$ 3,053,908	\$ 2,477,088	\$ 2,268,741	23.3%	9.2%			
Total utility plant	4,710,002	4,073,662	3,699,323	15.6%	10.1%			
Total assets	7,763,910	6,550,750	5,968,064	18.5%	9.8%			
Total deferred outflows of resources	401,026	282,685	230,231	41.9%	22.8%			
Total assets and deferred outflows of resources	\$ 8,164,936	\$ 6,833,435	\$ 6,198,295	19.5%	10.2%			
iabilities:								
Other liabilities	\$ 547,137	\$ 499,386	\$ 460,713	9.6%	8.4%			
Noncurrent liabilities	5,077,345	4,025,771	3,599,051	26.1%	11.9%			
Total liabilities	5,624,482	4,525,157	4,059,764	24.3%	11.5%			
Total deferred inflows of resources	1,335,026	1,102,850	933,103	21.1%	18.2%			
Net position:								
Net investment in capital assets	826,871	664,533	736,203	24.4%	-9.7%			
Restricted	378,557	540,895	469,225	-30.0%	15.3%			
Total net position	1,205,428	1,205,428	1,205,428	0.0%	0.0%			
Total liabilities, deferred inflows of resources, and net position	\$ 8,164,936	\$ 6,833,435	\$ 6,198,295	19.5%	10.2%			

The largest portion of the System's current fiscal year net position is investments in capital assets, including but not limited to land, improvements, buildings, machinery, and equipment. Investments in capital assets are reflected net of accumulated depreciation less any outstanding related debt used to construct or acquire those assets. The main use of these capital assets is to provide water delivery and storage, flood control, recreation, fish and wildlife enhancement, and hydroelectric power. There was an increase in capital assets of \$636.3 million primarily due to the construction of the Oroville Dam Spillway Recovery and Restoration Project. This increase was offset by an increase of \$474.7 primarily in debt related to capital assets, causing an overall increase in net investment in capital assets of \$161.6 million. Although the System's investments in its capital assets is reported net of related debt, it should be noted that resources needed to repay this debt must be provided from other sources, mainly contractual billings to the Water Contractors, since the capital assets themselves cannot be used to liquidate these liabilities.

The remaining balance of the System's current fiscal year net position represents restricted net position, which are resources subject to external restrictions on how they may be used.

The following table reflects how the System recognized revenues and expenses during the year:

#### Condensed Statements of Revenues, Expenses, and Changes in Net Position

	Fisc				
	2018	2017	2016	% Change 2018-2017	% Change 2017-2016
	(an	nounts in thousand	s)		
Operating revenues:					
Water supply	\$ 1,076,238	\$ 1,082,587	\$ 948,105	-0.6%	14.2%
Power sales	88,148	85,089	71,236	3.6%	19.4%
Federal and State reimbursements	42,127	55,664	67,309	-24.3%	-17.3%
Total operating revenues	1,206,513	1,223,340	1,086,650	-1.4%	12.6%
Operating expenses:					
Operations and maintenance	566,620	544,925	511,926	4.0%	6.4%
Purchased power	342,115	339,993	219,661	0.6%	54.8%
Depreciation and amortization	80,101	77,265	77,170	3.7%	0.1%
Operating expenses recovered, net	(88,572)	57,066	65,004	-255.2%	0.0%
Total operating expenses	900,264	1,019,249	873,761	-11.7%	16.7%
Income from operations	306,249	204,091	212,889	50.1%	-4.1%
Nonoperating revenues/expenses:					
Capital revenues recovered (deferred), net	(275,746)	(130,147)	(118,510)	111.9%	9.8%
Interest expense	(105,429)	(105,768)	(106,978)	-0.3%	-1.1%
Investment income (loss), net	15,353	9,012	6,235	70.4%	44.5%
Other revenues (expenses), net	59,573	22,812	6,365	161.1%	258.4%
Total nonoperating revenues/expenses	(306,249)	(204,091)	(212,889)	50.1%	-4.1%
Change in net position	-	-	-	-	-
Net position, beginning of year	1,205,428	1,205,428	1,205,428	0.0%	0.0%
Net position, end of year	\$ 1,205,428	\$ 1,205,428	\$ 1,205,428	0.0%	0.0%

<sup>\*</sup> Certain amounts have been reclassified from amounts previously reported to conform with the current year presentation.

### Revenues

#### **OPERATING REVENUES**

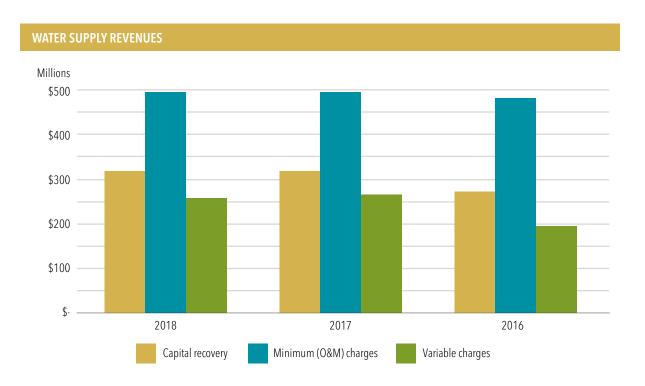
The decrease of \$16.8 million in operating revenues for fiscal 2018 is attributable to a decrease of \$13.5 million in federal and state reimbursements primarily due to funds depleted for capital cost recovery from Proposition 84 and Greenhouse Gas Reduction funds, and a decrease of \$6.3 million in water supply revenue billings mainly due to a change in the Delta Water rate. These decreases were offset by an increase of \$3 million in power sales.

The increase of \$136.7 million in operating revenues for fiscal 2017 is attributable to an increase of \$134.5 million in water supply revenue billings due to significant increases in precipitation throughout Northern California, which resulted in increased water deliveries, and an increase of \$13.8 million in power sales. These increases were offset by a decrease of \$11.6 million in federal and state reimbursements.

#### **WATER SUPPLY REVENUE**

The largest portion of operating revenues, approximately 89.2%, comes from Water Supply Revenue. In fiscal 2018, the System generated \$1,076.2 million in Water Supply Revenue, compared to \$1,082.6 million in fiscal 2017, and \$948.1 million in fiscal 2016.

The following table shows a comparative breakdown of the components of water supply revenue for fiscal years 2018, 2017, and 2016:

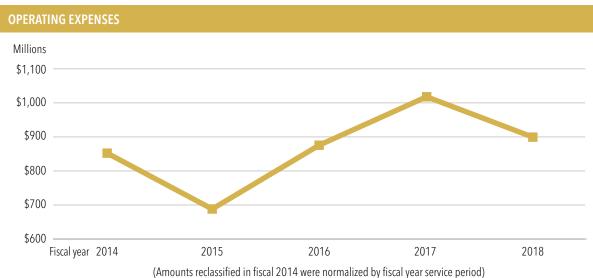


### **Expenses**

#### **OPERATING EXPENSES**

Total operating expenses decreased by \$119 million for fiscal 2018 to a total of \$900 million. The decrease is primarily due to the timing difference between recovery and recognition of operating costs, offset in part by increased employment costs.

Total operating expenses increased by \$145.4 million for fiscal 2017 to a total of \$1,019.2 million. The increase included \$20.3 million of higher power purchases and increased operations and maintenance expenses.



#### **OPERATIONS AND MAINTENANCE EXPENSES**

The increase in operations and maintenance expenses of \$22 million in fiscal 2018 was primarily due to a \$30 million increase in employment costs related to a change in the assumed discount rate used to calculate pension obligations.

Total operations and maintenance expenses increase of \$33 million in fiscal 2017 was mostly attributed to the following factors: \$48.1 million increase in wages and salaries costs related to the Oroville Dam Spillway Recovery and Restoration Project, pension expense and Other Postemployment Benefits other than Pensions (OPEB); \$7.5 million increase in purchased water supply expenses due to the purchase of environmental pulse flow water from Goodwin Dam and resold under the new multi-year Turnback Water Pool Program; and \$22.6 million net decrease in expenses included reduction in pollution remediation costs, general supplies, and miscellaneous expenses related to general operations and maintenance expenses.

#### **PURCHASED POWER**

In fiscal 2018, purchased power increased by \$2.1 million to a total of \$342.1 million. This slight increase was due to above average water levels at the reservoirs during fiscal 2018. This resulted in continued pumping demand.

In fiscal 2017, power purchases increased by \$120.3 million to a total of \$340 million. This was mainly due to significant increases in water deliveries. Heavy rains from January through April of 2017 helped refill the System's reservoirs, and

allowed for greater water deliveries than in previous years. The increased water deliveries resulted in increased pumping demand, and hence greater power purchases and increased transmission costs.

#### **OPERATING AND MAINTENANCE EXPENSE RECOVERED (DEFERRED)**

Operating and maintenance expense recovered (deferred) represents an adjustment for the timing difference between operations and maintenance (O&M) costs recovered as per the Water Supply Contracts and the incurrence of such O&M costs. Operating and maintenance expense recovered (deferred) decreased by \$145.6 million in fiscal 2018. This is due mainly to the normal-course timing differences for prior year over-recoveries offset in part by \$30 million of increased employment costs.

In fiscal 2017, operating and maintenance expense recovered decreased by \$7.9 million. This decrease resulted from increased power costs due to increased pumping demand and a decrease in net suspended costs.

#### **CAPITAL REVENUES DEFERRED**

Capital revenues deferred represents an adjustment for the timing difference between capital revenue recovered as per the Water Supply Contracts and the depreciation expense recognition of such capital assets and their associated financing costs. Capital revenues deferred increased by \$146 million in fiscal 2018. This is due primarily to the normalcourse compensation for prior year under-recoveries of \$88 million as well as an increased current year depreciation timing difference.

In fiscal 2017, capital revenues recovered increased by \$11.6 million in fiscal 2017. This increase was primarily due to the System having recognized current year capital revenues in excess of annual amounts in depreciation expense.

#### **INTEREST EXPENSE**

Interest expense for fiscal 2018 decreased by \$339 thousand to a total of \$105.4 million. The \$339 thousand decrease was attributable to the issuance of Revenue Bonds Series AX and AY, which refunded other bonds, as well as the gradual decrease in interest paid on the General Obligation (GO) and Devil Canyon Castaic (DCC) bonds as those bonds continue to mature.

Interest expense for fiscal 2017 decreased by \$1.2 million to a total of \$105.8 million. The \$1.2 million decrease was attributable to the issuance of Revenue Bonds Series AW, which refunded other bonds, as well as the gradual decrease in interest paid on the GO and DCC bonds as those bonds continue to mature.

### Capital Assets and Debt Administration

#### **CAPITAL ASSETS**

Investments in capital assets include utility plant and equipment, land, construction work in progress (CWIP), land use rights, computer software, other intangible assets, and general. The increase in the System's investment in capital assets for fiscal 2018 was \$636 million (including \$4.5 million of capitalized interest) and for fiscal 2017 was \$374 million (including \$29.8 million of capitalized interest), an increase of 15.62% and 10.12%, respectively. Additional details of capital assets are contained in Note 4.

The System's investment in capital assets is presented below:

Capital Assets								
	Balance (in thousands)							
	2018		2017			2016		
Nondepreciable Utility Plant	\$	1,670,646	\$	1,363,938	\$	1,029,435		
Depreciable Utility Plant		5,224,850		4,826,862		4,754,564		
Total Utility Plant		6,895,496		6,190,800		5,783,999		
Less Accumulated depreciation / amortization		(2,185,494)		(2,117,138)		(2,084,676)		
Utility Plant, Net	\$	4,710,002	\$	4,073,662	\$	3,699,323		

#### **LONG-TERM DEBT**

The System's total debt increased \$302.8 million (9.3%) during fiscal 2018. This increase was comprised of the issuance of approximately \$504.4 million in new debt, net of refundings, including premiums, offset by bond principal payments and amortization of premiums and discounts of \$262.5 million. The change in debt included the issuance of new bond Series AX and AY with a par amount of \$491.5 million and a premium of \$43.7 million, the issuance of \$500.5 million of commercial paper notes, which was partially offset by a \$531.2 million decrease due to the refunding of bond Series AX and AY, and the enactment of California Senate Bill 84, which increased the System's debt by an additional \$60.9 million. The most significant increase in debt was due to the issuance of commercial notes, which were used to finance costs related to the Oroville Dam Spillway Recovery and Restoration Project. During fiscal 2017, the System's total debt increased by \$313.1 million. This was comprised of new debt of \$515.1 million, net of refundings, and principal payments and amortization of premiums and discounts of \$202 million.

The System's long-term debt is presented below:

Long-Term Debt							
	Balance (in thousands)						
		2018	2017		2016		
Revenue Bonds	\$	2,869,007	\$	3,026,368	\$	2,770,888	
General Obligation Bonds		54,065		88,300		135,045	
Commercial Paper		580,672		147,165		42,776	
Surplus Money Investment Fund Loan		60,910		-		-	
Total		3,564,654		3,261,833		2,948,709	
Less current portion		(155,375)		(172,805)		(180,930)	
Long-term portion	\$	3,409,279	\$	3,089,028	\$	2,767,779	

Additional information on the System's long-term debt can be found in Notes 6 and 7 of this report.

### **Economic Factors**

The SWP must enter the power market to facilitate the operation of the California aqueduct. Operations continue 24 hours a day, seven days a week, with constant coordination with other utilities, Water Contractors, the California Independent System Operator (CAISO), and SWP pumping and generating plants. The power market, controlled by CAISO, can have a material impact on the power sales revenues and power purchase expenses of the SWP.

Economics, climate changes, and new legislation have required the System to explore and include more renewable energy sources. In 2005, Executive Order S-3-05 was signed into law and in 2006 Assembly Bill (AB-32) was passed, requiring California to reduce its Green House Gas (GHG) emissions to 1990 levels by 2020. By 2050, GHG emission levels must be below 80% of 1990 levels.

As a result of these new laws, California will require a higher percentage of the System's pumping load to be served by renewable energy sources. By 2050, approximately 50% of the System pump load will need to be supplied by renewable energy. In fiscal 2015, the System began purchasing renewable energy under a purchase contract with Dominion Solar-RE Camelot, a 45 MW solar plant. The System is also under contract for solar energy purchases with Solverde 1 and Solar Star California XLIV, which came on line near the end of calendar year 2016 and added an additional 95 MW of renewable power.

Every year, the SWP is confronted with factors that affect how the operation of the System is conducted. Some factors include plant or unit outages, environmental concerns, weather, fluctuations in natural gas prices, transmission line outages, and wild fires. In fiscal 2018, the SWP was still affected by the loss of the Thermalito Hyatt Power Plant (THPP) causing ongoing unavailability of units at DWR's Oroville complex.

Increased water allocations resulted in increased water deliveries and pumping through the SWP. Water deliveries increased from 2.94 million acre-feet in fiscal 2017 to 3.13 million acre-feet in fiscal 2018, an increase of 0.19 million acre-feet or 6.46%. The System maintained its increased water deliveries, although it experienced a dry winter in fiscal 2018. Factors that contributed to increased water deliveries were attributed to above average statewide precipitation and statewide snowpack in fiscal 2017. Additionally, the System experienced a significant wet winter in 2017, which provided some additional water in storage, with 1.4 million acre-feet of stored water in Lake Oroville reservoir increasing to over 2 million acre-feet in fiscal 2018.

While the weather is very unpredictable, the Department is hopeful that upcoming storms in the next fiscal year will continue to build up snowpack water content in Northern California.

## Requests for Information

This financial report is designed to provide a general overview of the System's finances for all those with an interest in the government's finances. Questions concerning any of the information provided in this report or requests for additional information should be addressed to the Chief, Enterprise Accounting Branch, 1416 Ninth Street Room 816, Sacramento, CA 95814.



# FINANCIAL STATEMENTS

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Statement of Net Position						
with comparative amounts for June 30, 2017)	June 30,					
	2018	2017				
Assets						
Current assets:						
Cash and cash equivalents	\$ 731,382	\$ 808,769				
Receivables:						
Interest on investments	4,229	2,552				
Water supply and power billings (net)	97,025	106,591				
Due from federal and state governments	53,636	35,253				
Due from others	115	85				
Inventories	5,437	5,011				
Total current assets	891,824	958,261				
Noncurrent assets:						
Restricted assets:						
Cash and cash equivalents restricted for plant replacements	37,408	33,204				
Cash and investments restricted for debt service	126,042	126,990				
Cash and cash equivalents on deposit with revenue bond trustee	33,913	33,695				
Amounts recoverable through future billings under long-term water supply contracts:						
Operations and maintenance expense	956,860	202,725				
Capital credit due from water contractors	372,608	348,845				
Unamortized project costs	220,458	318,574				
Unbilled interest incurred on capital costs	308,742	347,724				
Loans receivable from local water agencies	10,924	11,934				
Advances to other state funds	95,129	95,136				
Total noncurrent assets	2,162,084	1,518,827				
Utility Plant:						
Nondepreciable utility plant	273,896	267,941				
Depreciable utility plant	5,224,850	4,826,862				
Less accumulated depreciation/amortization	(2,185,494)	(2,117,138)				
Net utility plant in service	3,313,252	2,977,665				
Construction work in progress	1,396,750	1,095,997				
Total utility plant	4,710,002	4,073,662				
Total assets	7,763,910	6,550,750				
Deferred outflows of resources						
Deferral of loss on refunding	149,380	155,183				
Deferral of resources related to pensions	230,393	127,502				
Deferral of resources related to OPEB	21,253					
Total deferred outflows of resources	401,026	282,685				
Total assets and deferred outflows of resources	\$ 8,164,936	\$ 6,833,435				

Statements of Net Position (continued)					
with comparative amounts for June 30, 2017)	June 30,				
		2018	2017		
Liabilities					
Current liabilities:					
Current maturities of bonds	\$	155,375	\$	172,805	
Accounts payable		185,119		147,651	
Accrued compensated absences		15,402		15,590	
Pollution remediation		8,557		4,207	
Accrued interest on long-term debt		10,685		11,491	
Due to other state funds		53,059		52,292	
Proceeds due to water contractors		118,940		95,350	
Total current liabilities		547,137		499,386	
Noncurrent liabilities:					
General obligation bonds, net of current portion		28,090		54,065	
Revenue bonds, net of current portion		2,739,607		2,887,798	
Commercial paper		580,672		147,165	
Net pension liability		630,912		556,748	
Net OPEB liability		912,912			
Postemployment benefits other than pension obligations		-		262,390	
Surplus Money Investment Fund (SMIF) Loan		60,910			
Accrued compensated absences, net of current portion		26,926		25,313	
Pollution remediation, net of current portion		41,311		37,909	
Unearned revenue - State and Federal capital recovery		17,061		17,653	
Advances for plant replacements		38,944		36,730	
Total noncurrent liabilities		5,077,345		4,025,771	
Total liabilities		5,624,482		4,525,157	
Deferred inflows of resources					
Operations and maintenance expense		1,800		1,866	
Capital costs		1,104,772		952,245	
Power sales credit due to Water Contractors		133,249		137,348	
Deferral of resources related to pensions		13,472		11,391	
Deferral of resources related to OPEB		81,733		-	
Total deferred inflows of resources		1,335,026		1,102,850	
Total liabilities and deferred inflows of resources		6,959,508		5,628,007	
Net position:					
Net investment in capital assets		826,871		664,533	
Restricted for:		,-		,,,,,,,	
Debt service and plant replacements		197,363		193,889	
SWP related activites		181,194		347,006	
Total net position		1,205,428		1,205,428	
Total liabilities, deferred inflows of resources, and net position	\$	8,164,936	\$	6,833,43	
The accompanying notes are an integral part of these financial statements.		-, - ,,		-,,,,,,,	



Statements of Revenues, Expenses, and Changes in Net Position	(amounts in thousan				
(with comparative amounts for June 30, 2017)		led June 30	),		
		2018	2017		
Operating revenues:					
Water supply	\$	1,076,238	\$	1,082,587	
Power sales		88,148		85,089	
Federal and State reimbursements		42,127		55,664	
Total operating revenues		1,206,513		1,223,340	
Operating expenses:					
Operations and maintenance		566,620		544,925	
Purchased power		342,115		339,993	
Depreciation and amortization		80,101		77,265	
Operating expenses recovered, net	(88,572)		57,		
Total operating expenses		900,264		1,019,249	
Income from operations		306,249		204,091	
Nonoperating revenue (expenses):					
Capital revenues recovered (deferred), net		(275,746)		(130,147)	
Interest expense		(105,429)		(105,768)	
Investment income, net		15,353		9,012	
Other revenues (expenses), net		59,573		22,812	
Total nonoperating revenues (expenses)		(306,249)		(204,091)	
Change in net position		-			
Net position, beginning of year, as restated		1,205,428		1,205,428	
Net position, end of year	\$	1,205,428	\$	1,205,428	

Statements of Cash Flows		(ar	nounts in	thousands)	
(with comparative amounts for June 30, 2017)	Fiscal Year Ended June 30,				
		2018	2017		
Cash flows from operating activities:					
Receipts from customers	\$	1,222,810	\$	1,249,998	
Payment to employees for services		(374,955)		(367,083)	
Payments to suppliers		(421,068)		(437,278)	
Other receipts		59,082		21,044	
Net cash provided by operating activities		485,869		466,681	
Cash flows from capital and related financing activities:					
Proceeds from issuance of revenue obligation					
bonds including premium		-		330,700	
Payments to advance refund bonds		(39,760)			
Principal payments on long-term debt		(172,805)		(180,930)	
Commercial paper notes issued		500,484		200,379	
Principal payments on commercial paper notes		(66,976)		(95,990	
Interest payments on long-term debt		(79,462)		(40,069)	
Additions to utility plant and construction work in progress		(716,441)		(416,936)	
Net cash used by capital and related financing activities		(574,960)		(202,846)	
Cash flows from investing activities:					
Cash received from investment earnings		14,650		11,247	
Proceeds of investments matured		211,911		102,111	
Purchases of investments		(202,547)		(102,110)	
Loan payments from local water agencies		1,010		1,034	
Net cash provided by investing activities		25,024		12,282	
Net increase (decrease) in cash and cash equivalents		(64,067)		276,117	
Cash and cash equivalents, beginning of year		942,746		666,629	
Cash and cash equivalents, end of year	\$	878,679	\$	942,746	
Noncash capital and related financing activities:					
Amortization of bond premium/discount	\$	50,505	\$	34,541	
Amortization of deferred loss on refunding	Ŧ	(10,151)	Ŧ	(11,109)	
Principal retirements of long-term debt on proceeds received from		V =1 -= -1		( / /	
issuance of Series AX and AY Water System Revenue Bonds		531,255		97,430	
Noncash capital and related financing activities:	\$	571,609	\$	120,862	
toncash capital and related infancing activities.	Ψ	37 1,007	Ψ	120,002	

Statements of Cash Flows (continued)		(	'amounts i	n thousands	
(with comparative amounts for June 30, 2017)	Fiscal Year Ended June 30,				
		2018	2017		
Reconciliation to the statement of net position:					
Cash and cash equivalents	\$	731,382	\$	808,769	
Restricted assets:					
Cash and cash equivalents restricted for plant replacements		37,408		33,20	
Cash and cash equivalents restricted for debt service					
(net of \$50,066 and \$59,913 of U.S. Agency securities					
for 2018 and 2017, respectively)		75,976		67,07	
Cash and cash equivalents on deposit with revenue bond trustee		33,913		33,69	
Cash and cash equivalents	\$	878,679	\$	942,74	
		2018	2017		
Reconciliation of income from operations to net cash provided by					
operating activities:					
Income from operations	\$	306,249	\$	204,091	
Adjustment to reconcile income from operations to net cash provided by operating activities:					
Depreciation expense		80,101		77,26	
Other receipts		59,082		21,04	
Other non current liabilities		218,888		72,03	
(Increase) decrease in deferred charges and credits, net		(890,707)		7,63	
Changes in assets and liabilities:					
Decrease in receivables		9,535		13,02	
(Increase) decrease in inventories		(427)		16	
(Increase) decrease in due from federal government		(18,383)		3,34	
Increase in accounts payable, accrued vacation, and pollution remediation		61,652		22,17	
Increase in pension & other post employment benefits (OPEB)		650,522		32,19	
Increase (decrease) in due to other state funds		(14,233)		12,92	
Increase in proceeds due to Water Contractors		23,590		79	
Total adjustments		179,620		262,59	
		485,869	\$	466,68	



## NOTES TO FINANCIAL STATEMENTS

### 1. Reporting Entity

The State Water Resources Development System (System), administered by the Department of Water Resources (DWR), includes the State Water Project (SWP), the Davis-Grunsky Act Program, and the San Joaquin Drainage Implementation Program. It was constructed as the result of initial legislation in 1951 and subsequent legislation in the 1960s providing various financing mechanisms. The funds of the System are a part of the primary government of the State of California and are reported as a proprietary fund and business-type activity (non-governmental cost funds) within the State of California's financial statements. The SWP is a system of dams, water storage facilities, aqueducts, pumping stations and electric generation facilities, which have been constructed for purposes of developing firm water supply and conveying water to areas of need within the State and providing flood control, recreation, fish and wildlife enhancement, and hydroelectric power. The System has entered into Water Supply Contracts with 29 customers (Water Contractors) in order to recover substantially all System costs. The 29 Water Contractors are principally located in the San Francisco Bay Area, the Central Coast, the Central Valley and Southern California and their service areas encompass approximately 25% of the State's land area and 69% of its population.

The operations of the System are separate and distinct from other operations of the State of California. The accompanying financial statements only reflect the activity of the System and do not purport to, and do not, present fairly, the financial position of the State of California and the changes in its financial position and cash flows, where applicable, in conformity with accounting principles generally accepted in the United States of America. The System is accounted for as an enterprise fund comprised of two segments, the Burns-Porter Act and the Central Valley Project Act, and is financed and operated in a manner similar to that of a private business enterprise. The System uses the economic resources measurement focus and the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

### 2. Summary of Significant Accounting Policies

DWR is a department within the California Natural Resources Agency of the State, and is responsible for the planning, construction, and operation of the System's SWP. The System's operating revenues include water supply, power sales, and Federal and State Reimbursements. Under the Water Supply Contracts, the Water Contractors are required to pay to the System amounts calculated and billed as operating revenues, thus returning to the System substantially all annual operating costs. These operating expenses are comprised of the costs of sales and services, depreciation and amortization of capital assets, power and transmission costs, and administrative expenses.

Revenues from the Water Contractors pledged to the payment of debt, and net investment income are related to capital and financing activities and are defined as non-operating revenues and expenses.

#### **UTILITY PLANT**

Utility plant is recorded at historical cost. Historical cost includes labor, materials, and indirect items such as engineering, supervision, transportation, and interest on borrowed funds incurred during construction. Repairs, maintenance, and minor purchases of equipment are expensed as incurred.

#### **DEPRECIATION**

Depreciation is provided on a straight-line basis over the estimated useful lives of the various classes of utility plant, as follows:

Various Classes of Utility Plant	Estimated Useful Lives
Aqueducts	80 - 100 years
Dams and reservoirs	85 years
Environmental preservation and mitigation	50 years
Power plants	30 - 50 years
Pumping plants	30 - 40 years
Fish protection	35 - 36 years
Facilities	20 - 30 years
Equipment, computers, and vehicles	3 - 5 years
General	1 - 20 years

The System's intangible assets, consisting of software, land use and legal rights, costs associated with the Federal Energy Regulatory Commission (FERC) licenses, and compliance instruments are included in Utility Plant in Service (UPIS). Software costs are amortized on a straight-line basis over a five to ten-year useful life. Easements are land use rights and considered as either permanent or temporary. Permanent easements have an indefinite useful life and are nondepreciable while temporary easements are being amortized over a five-year useful life, unless otherwise specified in the purchase agreement.

A central element of California's Global Warming Solutions Act (AB 32) requires the System to obtain and surrender emission credits and allowances. Currently, these compliance instruments consist of Green House Gas (GHG) emission allowances for the System's share of compliance cost for the Lodi Energy Center (LEC). Since the economic benefit is not diminished until the credits are consumed, they will not be amortized. The credits will be included in UPIS and charged to expense as they are surrendered.

#### **CASH AND CASH EQUIVALENTS**

Cash and cash equivalents, for purposes of the statement of cash flows, includes cash on hand, restricted cash for plant replacements, restricted cash for debt service, and restricted cash on deposit with revenue bond trustee. Such amounts include deposits in the State of California Pooled Money Investment Account (PMIA), Surplus Money Investment Fund (SMIF), and instruments with original maturities of three months or less. Cash and cash equivalents do not include U.S. Government and Agency securities with original maturities of more than three months.

#### **RESTRICTED CASH AND INVESTMENTS**

Cash and cash equivalents on deposit with revenue bond trustee consists of debt service reserve funds held with a major national bank for the Series 1973 Devil Canyon - Castaic Facilities bonds and amounts held for Reid Gardner Unit 4 contingencies under the termination agreement.

Cash and cash equivalents with the State Treasurer for plant replacements and debt service are restricted as required by the provisions of the Water Supply Contracts and bond resolutions. Restricted funds consist of investments of the same type as those described below.

#### **CASH AND INVESTMENTS**

Cash not required for current use, including restricted cash, is invested in SMIF, which is stated at fair value. The weighted average to maturity of PMIA investments was 193 days as of June 30, 2018 and 194 days as of June 30, 2017. The total amount of deposits in SMIF was \$36.4 billion as of June 30, 2018 and \$37.3 billion as of June 30, 2017. The Pooled Money Investment Board (PMIB) has oversight responsibility for SMIF. The Board consists of three members as designated by state statute which shall consist of the State Controller, State Treasurer and Director of Finance. The value of the pool shares in SMIF, which may be withdrawn, is determined on an amortized cost basis, which is different than the fair value of the System's portion of the pool. PMIA funds are on deposit with the State's Centralized Treasury System and are not SEC registered, but are managed in compliance with the California Government Code and State policy.

The State's Investment Policy for the PMIA, which is managed by the State Treasurer's Office, sets forth the permitted investment vehicles, liquidity parameters and maximum maturity of investments. These investments consist of U.S. government securities, securities of federally-sponsored agencies, U.S. corporate bonds, interest bearing time deposits in California banks, prime-rated commercial paper, bankers' acceptances, negotiable certificates of deposit, repurchase and reverse repurchase agreements. The PMIA policy limits the use of reverse repurchase agreements subject to limits of no more than 10% of PMIA. The PMIA does not invest in leveraged products or inverse floating rate securities.

The System is authorized by statute to invest in the same types of investment vehicles permitted by the State's Centralized Treasury System. U.S. Treasury and agency debt securities are carried at fair value. Because investing is not a core part of the System's mission, the Systems determines that the disclosure related to these investments only need to be disaggregated by major type. Fair value is the amount at which a financial instrument could be exchanged in a current transaction between willing parties, and is determined from published data (quoted prices) provided by the exchanges, computerized pricing sources, the National Association of Securities Dealers' National Market System, securities custodians and other authoritative sources. Investments made by the System during the year ended June 30, 2018 are of a similar nature as those held at June 30, 2017.

#### **ADVANCES TO OTHER STATE FUNDS**

Advances to Other State Funds represent the System's advances to DWR's internal service fund that functions as a revolving working capital account for the System. The other Advances to Other State Funds represent the System's advances to the Department of General Services to fund the Rio Vista Science Center, a joint venture between DWR and the United States Fish and Wildlife Services.

#### **RECEIVABLES**

Receivables include amounts due from Water Contractors, organizations that purchase power from the System, Federal and State governments, accrued interest from financial institutions, and other miscellaneous customers.

#### **INVENTORIES**

The System carries two types of inventories, operating supplies and fuel. The method of accounting used for operating supplies is first-in, first-out inventory valuation. Fuel station tanks are located throughout the System, and fuel inventory is accounted for using the moving average cost method. Components of inventories at June 30, 2018 and 2017 were as follows:

Inventories				
	2018		20	17
Operating supplies	\$	5,080	\$	4,793
Fuel		357		218
Total	\$	5,437	\$	5,011

#### AMOUNTS RECOVERABLE THROUGH FUTURE BILLINGS

The System records unbilled costs as assets recoverable through future billings under the Water Supply Contracts. These costs include operations and maintenance costs and capital costs.

Unamortized project costs represent abandoned utility plant costs and certain research and development expenses that are recoverable through future billings to the Water Contractors under the terms of the Water Supply Contracts.

Unbilled interest incurred on unrecovered capital costs are classified as other long-term assets until billed under the terms of the Water Supply Contracts. Unbilled interest incurred represents the System's unrecovered interest since inception, recalculated annually at the System's cumulative weighted average cost of borrowing (Project Interest Rate). The System's Project Interest Rate was 4.61% for the years ended June 30, 2018 and 2017.

#### **REGULATED OPERATIONS**

The System has the authority to establish the level of rates necessary to recover generally all System costs, including debt service. As a regulated entity, the System's financial statements are prepared in accordance with the standards established by the Governmental Accounting Standards Board (GASB). The System is considered to be a Regulated Operation pursuant to GASB Statement No. 62, which requires that the effects of the rate-making process are recorded in the financial statements. Accordingly, certain expenses and credits, normally reflected in the change in net position, as incurred, are recognized when included in rates and recovered from or refunded to customers, the state, and the federal government. The System records various regulatory assets and credits to reflect rate-making actions of management.

#### **DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES**

In addition to assets, the statement of net position reports a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net position that applies to a future period(s) and so will not be recognized as an expense/expenditure until then.

In addition to liabilities, the statement of net position reports a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to a future period(s) and so will not be recognized as revenue until that time.

#### **Deferred Outflows of Resources**

Deferral of loss on refunding represents the difference between the reacquisition price and the net carrying amount of the refunded debt. The unamortized balance of deferred loss on refunding was \$149.4 million as of June 30, 2018 and \$155.2 million as of June 30, 2017. The \$5.8 million decrease is due to the scheduled annual amortization expense of \$10.1 million, offset with an increase of \$4.3 unamortized loss resulting from the current year refunding of Series AX and AY.

The System's allocated share of the deferred outflows of resources related to pensions was \$230.4 million and \$127.5 million as of June 30, 2018 and 2017, respectively. See Note 8 for additional information.

The System's allocated share of the deferred outflows of resources related to OPEB was \$21.3 million as of June 30, 2018. See Note 9 for additional information.

#### **Deferred Inflows of Resources**

Deferred operations and maintenance expenses represent operations and maintenance revenues collected in excess of operations and maintenance expenses incurred resulting from specific terms of the Water Supply Contracts and timing differences. The System had an ending balance of \$1.8 million and \$1.9 million in deferred inflows of operations and maintenance expenses as of June 30, 2018 and 2017, respectively.

Since the capital component of revenue allows for the recovery of capital costs plus interest related to the construction of the System's facilities, these revenues are presented as deferred inflows of resources. As these facilities are depreciated over time, the deferred capital costs are recovered. The System had an ending balance of \$1,104.8 million and \$952.2 million in deferred inflows of capital costs as of June 30, 2018 and 2017, respectively.

The power sales credit due to Water Contractors arises from revenue collected for the power generated by the Hyatt-

Thermalito Power Plant (HTPP). The power sales credit is amortized over time by a credit issued to the Water Contractors through the Delta Water Charge. The power sales credit decreased by \$4.1 million to an ending balance of \$133.2 million in fiscal 2018 compared to \$137.3 million in fiscal 2017.

The System's allocated share of the deferred inflows of resources related to pensions was \$13.5 million and \$11.4 million as of June 30, 2018 and 2017, respectively. See Note 8 for additional information.

The System's allocated share of the deferred inflows of resources related to OPEB was \$81.7 million as of June 30, 2018. See Note 9 for additional information.

#### **UNEARNED REVENUE - STATE AND FEDERAL CAPITAL RECOVERY**

Unearned Revenue represents reimbursement payments made by the State and Federal governments for their share of the System's capital costs in excess of the related depreciation expense recognized in the statement of revenues, expenses, and changes in net position.

#### **ADVANCES FOR PLANT REPLACEMENTS**

Advances for plant replacements represent billings under the terms of the Water Supply Contracts for future replacement of certain System assets. Receipts from such billings are restricted. Costs of plant replacements are charged to this reserve, as incurred.

#### **BOND ISSUANCE DISCOUNTS AND PREMIUMS**

Bond issuance discounts and premiums are reflected as a reduction/increase to the carrying value of the bonds outstanding and are amortized over the lives of the related debt instruments.

#### **NET POSITION**

The System classifies its net position into two components: net investment in capital assets and restricted.

Net investment in capital assets includes utility plant in service, net of accumulated depreciation, construction work in progress, unamortized project costs, less debt related to capital assets, unearned revenue, and other assets and liabilities related to the recovery of utility plant. Net investment in capital assets were \$826.9 million and \$664.5 million at June 30, 2018 and 2017, respectively.

The restricted component of net position is for debt service and State Water Project (SWP) related activities. Net position restricted for debt service represents reserves held by the System as required by its bond resolutions. Net position restricted for SWP related activities represents the requirements of legislation that created the System and authorized the construction of the SWP, to use the System's net position solely in support of the SWP, the Davis-Grunsky Act Program, and the San Joaquin Drainage Implementation Program. Restricted net position totaled \$378.6 million and \$540.9 million at June 30, 2018 and 2017, respectively.

#### **REVENUES**

The cost of providing services from the System is required to be recovered through user charges and other reimbursements. Under the terms of the Water Supply Contracts, the System granted the Water Contractors rate management reductions of approximately \$40.5 million for the years ended June 30, 2018 and 2017. Rate management reductions are reductions in capital related billings to the Water Contractors.

Revenues under the Water Supply Contracts are recognized when billings are due and payable. The billings cover debt service requirements, an additional 25% of revenue bond debt service to satisfy certain bond covenants, current operations and maintenance costs, and under collections. The Water Supply Contracts provide that the 25% portion of the billings collected for the purpose of satisfying certain bond covenants be refunded in the subsequent year. These billings, which totaled \$56.3 million for both fiscal years ended June 30, 2018 and 2017 are included as Proceeds Due to Water Contractors as presented in the Supplementary Information Debt Service Coverage. The Water Contractors received bond cover refunds of \$56.3 million and \$57.9 million in fiscal years 2018 and 2017, respectively.

Revenues from the sale of surplus power are recognized as the power is delivered.

The Federal government reimburses the System for certain operating and capital costs incurred by the System for flood control purposes. In addition, the Federal government reimburses the System for the Federal government's 39.90% share of the operating costs and 45% share of the capital costs of the San Luis joint use facilities and other water facilities. The State of California also reimburses the System for certain operating and capital costs incurred by the System for facilities located within the SWP. Revenue from the State and Federal government in excess of their share of the related depreciation expense is deferred until the related depreciation expense is recognized.

#### **COMPENSATED ABSENCES**

Compensated absences represent employees' vested unpaid vacation, annual leave, and other similar paid leave programs which are eligible for payment upon separation from state service. Unused sick-leave balances are not included in the compensated absences as they do not vest to employees.

#### **PENSIONS**

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the System's portion of the California Public Employees' Retirement System (CalPERS) pension plan and additions to or deductions from the plan's fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

#### OTHER POSTEMPLOYEMENT BENEFIT (OPEB)

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the System's portion of the CalPERS OPEB plan and additions to or deductions from the plan's fiduciary net position have been determined on the same

basis. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

#### **SEGMENTS**

The System has two segments, which are defined under governmental accounting standards, as an identifiable activity for which one or more revenue bonds or other revenue-backed debt instruments are outstanding:

- 1. Activities Allowed Under the Burns-Porter Act This segment accounts for the costs to build, operate, and maintain the facilities financed by General Obligation (GO) bonds as authorized by the Burns-Porter Act. Transportation and conservation revenues from the Water Contractors are recorded in this segment as well as power sales and reimbursements from Federal and State governments and interest on investments. Expenses are limited to operations and maintenance of the SWP constructed with GO bond proceeds, power purchases, replacements, and debt service on the GO bonds.
- 2. Activities Allowed Under the Central Valley Project Act This segment accounts for the costs to build, operate, and maintain the facilities financed by the Central Valley Project Water System revenue bonds. Capital and operating revenues from the Water Contractors for projects financed by revenue bond proceeds are recorded in this segment, as well as commercial paper sales, reimbursements from Federal and State governments for the San Luis Dam and Reservoir, Suisun Marsh, recreation costs, and interest on investments. Expenses are limited to the construction and operation of SWP facilities constructed with revenue bond proceeds and power facilities and debt service payments on the revenue bonds.

#### **COMPARATIVE DATA AND RECLASSIFICATIONS**

Comparative data for prior years have been presented for certain section of the accompanying financial statements in order to provide an understanding of changes in the System's financial position and operations. Also, certain amounts presented in the prior year have been reclassified in order to conform to the current year's presentation.

These reclassifications were necessary to accurately present amounts of the System's net position by its components: net investment in capital assets, restricted for debt service, and restricted for SWP related activities.

Statements of Net Position						
	Balance Previously reported at June 30, 2017		Reclassification		June 30, 2017 (After Reclassification)	
Net position:						
Net investment in capital assets	\$	825,218	\$	(160,685)	\$	664,533
Restricted for:						
Debt service		-		193,889		193,889
SWP related activities		380,210		(33,204)		347,006

## 3. Interests in Jointly Owned Facilities

At June 30, 2018 and 2017, the System owned the following undivided interests in jointly-owned facilities that are recorded in UPIS:

#### **Interests in Joint-Use Facilities**

	Joint Party	_	System's Portion Based on % Owned					
		% Owned by System	Utility Plant/Construction Work in Progress		Accumulated Depreciation			
			2018	2017	<u>2018</u>	2017		
San Luis Joint-Use Facilities	USBR	55%	\$ 278,031	\$ 241,307	\$ 57,531	\$ 54,223		
SWP Hydropower Facilities License	LADWP	50%	\$ 2,718	\$ 1,735	\$ -	\$ -		

The amounts above include the System's share of direct costs related to constructing the facilities. Each participant provides its own financing for the jointly-owned facility.

DWR is the operator of the San Luis Joint-Use Facilities. All of the operating expenses related to these facilities are included as operating expenses in the statement of revenues, expenses, and changes in net position. The Federal government is billed for its share of the operating expenses and these billings are included as operating revenues in the statement of revenues, expenses, and changes in net position.

# 4. Utility Plant

The summarized activity of the System's utility plant during 2018 is presented below:

Utility Plant June 30, 2018					
	Beginning Balance	Transfers and Additions	Transfers and Deletions	Ending Balance	
Nondepreciable Utility Plant:					
Land	\$ 156,934	\$ 5,523	\$ -	\$ 162,457	
Construction work in progress (CWIP)	1,095,997	705,995	(405,202)	1,396,750	
Land use rights	11,767	691	-	12,458	
Other intangible assets	99,240		(259)	98,981	
Total nondepreciable utility plant	1,363,938	712,169	(405,461)	1,670,646	
Depreciable Utility Plant:					
Aqueducts	2,126,713	57,126	-	2,183,839	
Dams & reservoirs	729,521	87,520	-	817,041	
Power plants	477,044	46,485	-	523,529	
Pumping plants	850,475	168,152	-	1,018,627	
Environmental preservation and mitigation	67,797	-	-	67,797	
Fish protection	35,544	-	-	35,544	
Facilities	298,295	2,862	-	301,157	
Equipment and other depreciable assets	82,526	4,451	(11,763)	75,214	
Computer software	27,108	98	-	27,206	
Land use rights	272	-	-	272	
Other intangible assets	12,005	-	-	12,005	
General	119,562	43,057	-	162,619	
Total depreciable utility plant	4,826,862	409,751	(11,763)	5,224,850	
Less: accumulated depreciation and amortization:					
Aqueducts	(616,435)	(24,448)	-	(640,883)	
Dams & reservoirs	(380,536)	(9,159)	-	(389,695)	
Power plants	(306,011)	(11,121)	-	(317,132)	
Pumping plants	(600,979)	(11,519)	-	(612,498)	
Environmental preservation and mitigation	(36,380)	(1,366)	-	(37,746)	
Fish protection	(30,545)	(730)	-	(31,275)	
Facilities	(29,418)	(9,878)	-	(39,296)	
Equipment and other depreciable assets	(65,537)	(5,939)	11,745	(59,731)	
Computer software	(24,534)	(643)	-	(25,177)	
Land use rights	(272)	-	-	(272)	
Other intangible assets	(4,806)	(1,202)	-	(6,008)	
General	(21,685)	(4,096)	-	(25,781)	
Total accumulated depreciation and amortization	(2,117,138)	(80,101)	11,745	(2,185,494)	
Net depreciable plant	2,709,724	329,650	(18)	3,039,356	
Total Utility Plant - net	\$ 4,073,662	\$ 1,041,819	\$ (405,479)	\$ 4,710,002	

The summarized activity of the System's utility plant during 2017 is presented below:

	Beginning Balance	Transfers and Additions	Transfers and Deletions	Ending Balance	
Nondepreciable Utility Plant:					
Land	\$ 147,681	\$ 9,279	\$ (26)	\$ 156,934	
Construction work in progress (CWIP)	769,871	405,719	(79,593)	1,095,997	
Land use rights	11,760	7	-	11,767	
Other intangible assets	100,123		(883)	99,240	
Total nondepreciable utility plant	1,029,435	415,005	(80,502)	1,363,938	
Depreciable Utility Plant:					
Aqueducts	2,171,981	-	(45,268)	2,126,713	
Dams & reservoirs	708,303	34,921	(13,703)	729,521	
Power plants	470,818	8,839	(2,613)	477,044	
Pumping plants	838,880	11,595	-	850,475	
Environmental preservation and mitigation	67,797	-	-	67,797	
Fish protection	35,544	-	-	35,544	
Facilities	271,965	33,101	(6,771)	298,295	
Equipment and other depreciable assets	79,229	9,680	(6,383)	82,520	
Computer software	24,717	2,391	-	27,108	
Land use rights	272	-	-	272	
Other intangible assets	12,005	-	-	12,005	
General	73,053	46,509	-	119,562	
Total depreciable utility plant	4,754,564	147,036	(74,738)	4,826,862	
Less: accumulated depreciation and amortization:					
Aqueducts	(614,557)	(24,832)	22,954	(616,435	
Dams & reservoirs	(382,522)	(9,715)	11,701	(380,536	
Power plants	(297,433)	(11,146)	2,568	(306,011	
Pumping plants	(588,036)	(11,030)	(1,913)	(600,979	
Environmental preservation and mitigation	(35,014)	(1,366)	-	(36,380	
Fish protection	(29,842)	(703)	-	(30,545	
Facilities	(23,425)	(9,113)	3,120	(29,418	
Equipment and other depreciable assets	(67,364)	(4,546)	6,373	(65,537	
Computer software	(24,100)	(434)	-	(24,534	
Land use rights	(229)	(43)	-	(272	
Other intangible assets	(3,603)	(1,203)	-	(4,806	
General	(18,551)	(3,134)	-	(21,685	
Total accumulated depreciation and amortization	(2,084,676)	(77,265)	44,803	(2,117,138	
Net depreciable plant	2,669,888	69,771	(29,935)	2,709,724	
Total Utility Plant - net	\$ 3,699,323	\$ 484,776	\$ (110,437)	\$ 4,073,662	

### 5. Investments

The System maintains cash deposits with the State's Surplus Money Investment Fund (SMIF), which is part of the Pooled Money Investment Account (PMIA). The State Treasurer manages the PMIA in accordance with various provisions of the California Water Code and the State's investment policies. The State Treasurer also acts as trustee for the System's revenue bonds, and manages the System's investments. Investment of the System's funds is administered in accordance with California Government Code, State's policies, and applicable provisions of the Central Valley Project Act bond resolutions.

The System follows GASB Statement No. 40, Deposit and Investment Risk Disclosures. This statement requires the disclosure of five types of risks: interest, credit, custodial, concentration, and foreign currency. Additional disclosures required by GASB No. 40 for cash deposits and investments within the State's centralized treasury system can be found in the State of California's Comprehensive Annual Financial Report.

The System categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles (GAAP) and in accordance with GASB Statement No. 72. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs. Deposits and withdrawals are made on the basis of \$1 and not fair value. Accordingly, the System's proportionate share of investments in the State Treasury at June 30, 2018 of \$844.8 million is an uncategorized input not defined as a Level 1, Level 2, or Level 3 input.

The following is a summary of the System's cash and investments by percentage of total, their related credit ratings and by fair value measurement as of June 30, 2018:

Cash and Investments at June 30, 2018							
				Maturities			Fair Value Measurement
	% of Total	Credit Rating (S&P)	Under 30 Days	31-180 Days	181-365 Days	6/30/2018	Using Quoted Prices in Active Markets for Identical Assets (Level 1)
Investments by fair value level:							
US Treasury Notes	5%	AA+	\$ 50,066	\$ -	\$ -	\$ 50,066	\$ 50,066
Total investment by fair value level			\$ 50,066	\$ -	\$ -	\$ 50,066	\$ 50,066
Investments not subject to fair value level:							
Surplus Money Investment Fund	91%	Not rated	-	-	844,766	844,766	
Cash and Investments held outside State Treasury:							
Money Market Funds	4%	AAA	33,913	-	-	33,913	
Total cash and investments			\$ 83,979	\$ -	\$ 844,766	\$ 928,745	

The following is a summary of the System's cash and investments by percentage of total, their related credit ratings and by fair value measurement as of June 30, 2017:

Cash and Investments at June 30, 2017							
			Maturities				Fair Value Measurement
	% of Total	Credit Rating (S&P)	Under 30 Days	31-180 Days	181-365 Days	6/30/2017	Using Quoted Prices in Active Markets for Identical Assets (Level 1)
Investments by fair value level:							
Federal National Mortgage Association	1%	ДД+	\$ -	\$ .	\$ 9,172	\$ 9,172	\$ 9,172
Federal Home Loan Bank	5%	AA+	50,741			50,741	50,741
Total investment by fair value level			\$ 50,741	\$ -	\$ 9,172	\$ 59,913	\$ 59,913
Investments not subject to fair value level:							
Surplus Money Investment Fund	91%	Not rated	-	-	909,050	909,050	
Cash and Investments held outside State Treasury:							
Money Market Funds	3%	AAA	33,695			33,695	
Total cash and investments			\$ 84,436	\$ .	\$ 918,222	\$1,002,658	

Interest Rate Risk: Interest rate risk is the risk that the value of fixed income securities will decline because of rising interest rates. The prices of fixed income securities with a longer time to maturity, measured by weighted average to maturity, tend to be more sensitive to changes in interest rates than those with a shorter duration. As of June 30, 2018 and 2017, the weighted average maturity of the investments contained in SMIF is approximately 193 days and 194 days, respectively.

Custodial Credit Risk: For deposits, custodial credit risk is that in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code does not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits or investments, other than the following provision for deposits: the California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law. The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits.

Credit Risk: Credit risk is the risk that a debt issuer will fail to fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. PMIA funds are on deposit with the State's Centralized Treasury System and are managed in compliance with the California Government Code, according to a statement of investment policy discussed in Note 2. The PMIA is not rated.

Concentration of Credit Risk: Concentration of credit risk is the risk of loss attributed to the magnitude of an investor's holdings in a single issuer. The investment policy of the State Treasurer's Office contains no limitations on the amount that can be invested in any one issuer beyond those limitations stipulated in the California Government Code. As of June 30, 2018 and 2017, the System had investments contained in SMIF totaling 91% for both fiscal years. The System's PMIA investments totaled \$844,766 and \$909,050 for the fiscal years ended June 30, 2018 and 2017, respectively. Investments outside the State's Centralized Treasury System totaled \$83,979 and \$93,608 for the fiscal years ended June 30, 2018 and 2017, respectively.

Interest on deposits in PMIA varies with the rate of return of the underlying portfolio and averaged 1.376%, and 0.754% for the years ended June 30, 2018 and 2017, respectively. For the years ended June 30, 2018 and 2017, interest earned on the deposits with PMIA approximated \$12.1 million and \$6.9 million, respectively. Interest earned is included in the other revenues (expenses) line item on the statement of revenues, expenses, and changes in net position.

The U.S. Treasury Notes of \$50.1 million are valued using quoted market prices (Level 1 input). Income is comprised of interest, dividends, realized gains and losses, and unrealized gains and losses due to changes in the fair value of investments held at year-end.

# 6. Long-Term Debt

The following is a summary of changes in long-term debt for the years ended June 30, 2018 and 2017:

Long-Term Debt								
		Revenu	e Bonds		General Obligation Bonds	Commercial Paper	SMIF Loan	Total Long Term Debt
	Par Amount	Unamortized Discount	Unamortized Premium	Total Revenue Bonds	Par Amount	Par Amount	Loan Amount	
Balance at June 30, 2016	\$ 2,489,675	(7)	\$ 281,220	\$ 2,770,888	\$ 135,04	5 \$ 42,776	\$	\$ 2,948,709
Additions	428,130	-	93,506	521,636		- 200,379		722,015
Retirements	(97,430)	-	(13,404)	(110,834)		- (95,990)		(206,824)
Amortization		1	(21,138)	(21,137)				(21,137)
Payments	(134,185)			(134,185)	(46,745			(180,930)
Balance at June 30, 2017	2,686,190	(6)	340,184	3,026,368	88,300	147,165	-	3,261,833
Additions	491,495	-	71,473	562,968		- 500,483	60,910	1,124,361
Retirements	(531,255)	-	(27,767)	(559,022)		- (66,976)	-	(625,998)
Amortization	-	-	(22,737)	(22,737)			-	(22,737)
Payments	(138,570)			(138,570)	(34,235	)		(172,805)
Balance at June 30, 2018	2,507,860	(6)	361,153	2,869,007	54,065	580,672	60,910	3,564,654
Less current portion	(129,400)			(129,400)	(25,975		-	(155,375)
Total Long-Term Debt	\$ 2,378,460	\$ (6)	\$ 361,153	\$ 2,739,607	\$ 28,090	580,672	\$ 60,910	\$ 3,409,279

#### **GENERAL OBLIGATION BONDS**

The Burns-Porter Act authorized the issuance of State Water Resources Development System (SWRDS) General Obligation (GO) Bonds in the amount of \$1,750 million for construction of the System. This amount included \$130 million to be set aside for financial assistance to local water agencies as provided in the Davis-Grunsky Act. The Burns-Porter Act also made a continuing appropriation of the California Water Fund, a fund unrelated to the System, to supplement the bond authorization. To the extent California Water Fund money was used for construction of the State water facilities in lieu of bond proceeds, an equal amount of bond authorization was set aside to be used only for the construction of additional facilities of the System that met certain requirements set forth in the Burns-Porter Act.

Under the Burns-Porter Act, revenues of the System, other than revenues attributable to facilities financed with Water System Revenue Bonds, are deposited in the California Water Resources Development Bond Fund and are to be used annually only for the following purposes and in the following order of priority:

- 1. To pay the maintenance, operation and replacement costs of the System,
- 2. To pay, or reimburse the General Fund of the State for, the principal of and interest on the SWRDS GO Bonds issued for the System as it becomes due,
- 3. To reimburse the California Water Fund for funds utilized from said fund for construction of the System (complete reimbursement has been made), and
- 4. To pay additional costs of the acquisition and construction of the System.

All such revenues are pledged for these uses and purposes for the benefit of the owners of the SWRDS GO Bonds.

As of June 30, 2018, the amount of the revenues pledged to repay the Burns-Porter Act SWRDS GO Bonds debt service is \$58.5 million with payments through 2025. Principal and interest paid for the current year was \$38 million and Burns-Porter Act water supply operating revenues were \$840.7 million. As of June 30, 2017, the amount of the revenues pledged to repay the Burns-Porter Act SWRDS GO Bonds debt service was \$96.5 million. Principal and interest paid for 2017 was \$52.4 million and Burns-Porter Act SWRDS water supply operating revenues were \$841.5 million.

SWRDS GO Bonds of \$168 million are authorized but un-issued as of June 30, 2018 and 2017, and may only be used for additional facilities, meeting certain requirements of the Burns-Porter Act.

Outstanding SWRDS GO Bonds include Series L through Series S, which may be called at any time for early redemption. SWRDS GO Bonds Series X and Y do not have early redemption provisions.

SWRDS GO Bonds consist of the following at June 30, 2018:

#### **General Obligation Bonds**

				Amounts Outstanding			ng	
Fiscal Year of Issue	Series	Fixed Rates	Fiscal Year of Final Maturity	20	18	2	2017	
1968	J	3.5%	2018	\$	-	\$	4,500	
1968	K	4.0%	2018		-		4,500	
1969	L	4.5%	2019		4,500		8,900	
1969	М	4.0%	2019		4,500		8,900	
1970	N	5.0%	2020		8,900		13,200	
1970	Р	5.0%	2020		8,900		13,200	
1971	Q	4.8%	2021		13,200		17,300	
1971	R	4.8%	2021		6,600		8,650	
1972	S	5.3%	2022		6,920		8,520	
1994	Χ	4.8%	2024		300		350	
1995	Υ	7.0-7.1%	2025		245		280	
Total General Obligat	tion bond debt out	standing at par			54,065		88,300	
Less current portion	Less current portion				(25,975)		(34,235)	
Total Long-term Gene	eral Obligation bor	nd debt outstanding		\$	28,090	\$	54,065	

#### **REVENUE BONDS**

The Water System Revenue Bonds have been issued for the acquisition or construction of projects to provide water and power for the SWP. Under the statute pursuant to which Water System Revenue Bonds are issued, principal and interest on the bonds are secured by and payable solely from revenues attributable to the facilities financed by the bonds. These are primarily payments under the Water Supply Contracts between the System and Water Contractors.

As of June 30, 2018, the amount of the revenues pledged to repay the Water System Revenue Bonds debt service is \$3,452.2 million with payments through fiscal 2036. Principal and interest paid for the current year was \$240.9 million and CVP water supply operating revenues were \$235.5 million. As of June 30, 2017, the amount of the revenues pledged to repay the Water System Revenue Bonds debt service were \$3,726.7 million with payments through 2036. Principal and interest paid for the previous year was \$242.6 million and CVP water supply operating revenues were \$241.1 million.

On December 19, 2017, the System issued tax-exempt fixed-rate Water System Revenue bonds (Series AX), and federally taxable fixed-rate Water System Revenue bonds (Series AY), with par amounts of \$350.7 million and \$140.8 million, respectively, to current refund Series AO, and partially advance refund Series AE, AF, AG, AH, AI, AK, AN, AP, AQ,

and AR. Series AX was issued with a premium of \$71.5 million and Series AY was issued at par. DWR took advantage of low interest rates and achieved an economic gain of \$27.6 million, representing 5.2% of the refunded bonds. Bond proceeds were also used to pay the costs of issuance and fund the reserve account.

On August 3, 2017, the System remarketed its variable rate Water System Revenue bonds (Series AT and Series AU) with par amounts of \$149.2 million and \$109.3 million respectively. The variable rate bonds were remarketed in advance of upcoming mandatory tender dates resulting in the System's election to adjust the interest rate period for each bond series. Series AT was originally issued on November 6, 2014, and had a mandatory tender date of December 1, 2017. Series AU was originally issued on September 2, 2015 and had a mandatory tender date of September 1, 2017. As a result of this remarketing transaction, the weighted average interest rate for both series decreased 0.13% from 0.44% to 0.31%, and the weighted average remarketing term increased from 2.6 years to 4.5 years. DWR retained the Securities Industry and Financial Markets Association (SIFMA) index for calculating interest payments.

On October 20, 2016, the System issued tax-exempt Water System Revenue bonds (Series AW) with a par amount of \$428.1 million and a Premium of \$93.5 million. The proceeds from the Series AW were used to (1) provide \$267 million of advance funds for the construction of certain Water System Projects, (2) pay off \$96 million outstanding Water Revenue Commercial Paper Notes Series 1, and (3) refund certain of the outstanding Water System Revenue Bonds with par value of \$97.4 million. Series AW was issued with fixed coupon rates at 3.0% and 5.0%, and maturities ranging from 2018 to 2035. Series AW bonds maturing on or after December 1, 2026 will be subject to redemption prior to their stated maturities, at a redemption price equal to the bonds being redeemed, plus accrued interest, without premium.

The System is subject to certain bond covenants, the most restrictive of which requires that the revenues in each year shall be at least equal to 1.25 times the debt service payable from revenues on all bonds outstanding in such year, plus operating costs, and the required funding of the debt service reserve account. The bonds are limited special obligations of the System; neither the principal nor any interest thereon constitutes a debt of the State. Certain bonds are redeemable prior to maturity at a redemption price of 100%.

Water System Revenue Bonds consist of the following at June 30, 2018:

# **CVP Revenue Bonds**

					Amounts Outstanding			
Fiscal Year of Issue	Series	Fixed Rates	Fiscal Year of Final Maturity	Fiscal Year of First Call Date	2018		2017	
Devil Canyon-Castaic F	Facilities:							
1973	A&B	5.3%	2023	1983	\$ 38	3,955_	\$	45,475
CVP Water System:								
1999	V	6.3%	2025	None	,	18,050		18,050
2002	Χ	5.5%	2018	None		-		16,13
2008	AE	3.7-5.0%	2019	2018		5,700		54,910
2009	AF	4.0-5.0%	2021	2019	,	13,355		93,855
2010	AG	4.0%	2020	None		785		20,505
2011	АН	3.8-5.0%	2023	2021	,	18,385		31,930
2012	Al	5.0%	2026	2022	4	45,590		62,845
2012	AJ	4.0-5.0%	2030	2022	7	79,885		101,230
2012	AK	3.0-5.0%	2030	2022		9,745		11,965
2013	AL	5.0%	2030	2023	[	56,605		62,37
2013	AM	5.0%	2026	2023	13	34,235		145,830
2013	AN	4.0-5.0%	2030	2023	,	16,535		28,500
2013	AO	1.3-3.5%	2018	None		-		259,975
2013	AP	3.0-4.0%	2036	2023	,	14,265		31,040
2013	AQ	4.0-5.0%	2036	2023	4	14,510		115,445
2014	AR	4.0-5.0%	2036	2024	}	34,725		151,085
2015	AS	2.0-5.0%	2033	2025	64	41,860		641,860
2015	AT	Variable	2036	2017	14	19,245		149,245
2016	AU	Variable	2036	2017	10	09,275		109,275
2016	AV	4.0-5.0%	2036	2026	10	06,530		106,530
2017	AW	3.0-5.0%	2036	2027	42	28,130		428,130
2018	AX	5.0%	2036	2028	35	50,670		
2018	AY	2.1-3.1%	2030	2028	14	10,825		
Total CVP Water Syster	m Revenue B	onds			2,46	68,905		2,640,715
Total revenue bond	debt outsta	nding at par			2,50	07,860		2,686,190
Unamortized bond iss	uance premi	ums			36	51,153		340,184
Unamortized bond iss	uance discou	ınts				(6)		(6
Less current portion					(12	9,400)		(138,570
Total long-term bon	d debt outs	tanding			\$ 2,73	39,607	\$	2,887,798

#### **FUTURE DEBT SERVICE REQUIREMENTS**

Future principal and interest payment requirements on the bonds are as follows at June 30, 2018:

### **Future Debt Service Requirements**

	Revenue Bonds			General Obligation Bonds					All Bonds				
Year	Pr	incipal	lr	nterest	Total	Pri	ncipal	Int	erest		Total		Total
2019	\$	129,400	\$	110,397	\$ 239,797	\$	25,975	\$	2,414	\$	28,389	\$	268,186
2020		149,360		105,157	254,517		17,405		1,386		18,791		273,308
2021		151,685		97,426	249,111		8,595		527		9,122		258,233
2022		154,695		90,238	244,933		1,885		109		1,994		246,927
2023		161,270		82,692	243,962		85		10		95		244,057
2024-2028		750,930		303,780	1,054,710		120		6		126		1,054,836
2029-2033		641,200		133,568	774,768		-		-		-		774,768
2034-2036		369,320		21,057	 390,377		-		-		-		390,377
	\$	2,507,860	\$	944,315	\$ 3,452,175	\$	54,065	\$	4,452	\$	58,517	\$	3,510,692

<sup>\*</sup>Includes variable rate bonds for Series AT and Series AU, which bear interest at a weekly rate. An assumed rate of 3.0% for Series AT and 2.85% for Series AU was used to project the variable portion of interest payments in this table. The interest rate still in effect was determined at issuance date using the Securities Industry and Financial Markets Association (SIFMA) Swap 10 year average Index, plus an applicable basis point spread.

#### **SURPLUS MONEY INVESTMENT FUND LOAN**

On July 10, 2017, the California Senate Bill 84 was enacted, an act to amend Sections 16475 and 16480.6 of, and to add Section 20825 to, the Government Code, relating to state employees' retirement. This bill would require the State Controller's Office (SCO) to transfer up to \$6 billion from the Surplus Money Investment Fund and other funds in the Pooled Money Investment Account to the General Fund as a cash loan, the proceeds of which would supplement the state's employer contributions for the fiscal year 2017-2018. This bill would also require that repayment of the loan principal and the payment of interest be made from the General Fund and other funds and accounts that are required by law to fund the state's employer contribution to the Public Employees' Retirement Fund. The loan is to be fully repaid by June 30, 2030. The amount allocated to the System was \$60.9 million and the repayment schedule is currently under review.

### **COMMERCIAL PAPER NOTES**

In March 1993, the System launched its commercial paper (CP) program to pay for Water System Capital costs relating to State Water System Projects. Pursuant to the original Resolution No. DWR-CP-1, adopted as of March 1, 1993, the Department authorized the issuance of CP Notes Series 1 in an aggregate amount not to exceed \$150 million, limited to \$139.7 million in principal and \$10.3 million of accrued interest. To provide liquidity for the program, the Department entered into two separate credit agreements with two commercial banks on May 3, 2017. Pursuant to Resolution No.

DWR-CP-5, adopted on May 1, 2017, the Department authorized the increase of the issuance of CP Notes Series 1 (Series 1) in an amount not to exceed \$300 million in principal and \$22.2 million in accrued interest. On the same date, pursuant to Resolution DWR-CP-Series 2-1, the Department authorized the issuance of new CP Notes Series 2 (Series 2), with a limit not to exceed \$500 million in principal and \$37 million in accrued interest. On February 1, 2018, pursuant to Resolution No. DWR-CP-Series 2-2, the Department authorized an additional increase of the issuance of Series 2 in an amount not to exceed \$800 million in principal and \$59.2 million in accrued interest, to expand its total CP capacity to \$1.1 billion in principal and \$81.4 million in accrued interest. The Series 2 program was established to pay for costs relating to the Oroville Dam Spillway Recovery and Restoration Project.

The Department has two revolving credit agreements supporting its \$1.1 billion CP program. The Department entered into two credit agreements with two banks on May 4, 2017 and February 1, 2018, respectively. Series 1 expires on May 1, 2020 and Series 2 expires on February 25, 2021, but both can be extended for up to three years upon written request and approval of the banks. They require quarterly commitment fee payments on the first business day of each July, October, January and April. As of June 30, 2018, there were no borrowings with the banks under the current revolving credit agreements.

The Series 1 is supported by a credit agreement with Bank of America, N.A. The Series 1 program, which was originally supported by a \$150 million, credit agreement with Bank of Montreal, was scheduled to expire on October 24, 2017, but was terminated early on May 4, 2017. Under the old credit agreement, Bank of Montreal was obligated to provide \$150 million, with principal limited to \$139.7 million and \$10.3 million of accrued interest. There were no borrowings with Bank of Montreal under this revolving credit agreement before it was terminated. Under the new credit agreement effective on May 4, 2017, Bank of America N.A. is obligated to provide up to \$300 million in principal at any one time and \$22.2 million of accrued interest. For sizing purposes, accrued interest is calculated at 10% per annum for 270 days on a maximum principal commitment of \$300 million.

The Series 2 is supported by a credit agreement with Wells Fargo Bank, National Association. Under the original agreement dated May 4, 2017, the bank was obligated to provide up to \$500 million in principal at any one time and up to \$37 million of accrued interest. Under the new agreement dated February 26, 2018, the bank is obligated to provide up to \$800 million of principal at any one time and \$59.2 million of accrued interest. For sizing purposes, interest is calculated at 10% per annum for 270 days on a maximum principal commitment of \$800 million.

As of June 30, 2018, the amount of CP notes outstanding was \$24.6 million for the Series 1, and \$556.1 million for the Series 2. As of June 30, 2017, there were no CP notes outstanding for the Series 1, and the amount outstanding for the Series 2 was \$147.2 million. The weighted average rate for interest expense for the Series 1 Notes approximated 1.27% for the year ended June 30, 2018 and 0.63% for the year ended June 30, 2017. The weighted average rate for interest expense for the Series 2 Notes approximated 1.16% for the year ended June 30, 2018 and 0.86% for the year ended June 30, 2017. The System expects a significant portion of Series 2 Notes to be paid with proceeds from the federal government as reimbursement for costs relating to the Oroville Dam Spillway Recovery and Restoration Project. During fiscal 2018, the Department received approximately \$69 million in federal reimbursement. Any CP outstanding remaining after all reimbursements have been received will be refunded with Revenue Bonds.

Proceeds from the sale of CP notes are used to finance Water System Projects prior to permanent financing from the sale of Water System Revenue Bonds. Proceeds from the Series 2 Notes are restricted to be used to provide funds for costs related to the Oroville Dam Spillway Recovery and Restoration Project (Oroville) and proceeds from the Series 1 Notes are restricted to be used to provide funds for costs related to all Water System projects, including Oroville. The liability has been classified as long-term as it is the System's policy to redeem the Commercial Paper outstanding with the issuance of Water System Revenue Bonds. The System's obligation to make debt service payments on Commercial Paper Notes is subordinate to its payment obligations with respect to the Water System Revenue Bonds and SWRDS GO Bonds.

The Water Supply Contracts, in their original form, provide for two charges to the Water Contractors: (a) a Delta Water Charge and (b) a Transportation Charge. These charges are computed to return to the State the costs of the facilities necessary to deliver water to the Water Contractors, including capital costs (with interest) and operation and maintenance costs, and expressly including in the case of the facilities to be financed with commercial paper and the related Water System Revenue Bonds, debt service and 1.25 debt service coverage requirements to be satisfied from revenues.

# 7. Bond Refundings and Defeasances

During the current fiscal year, the System issued CVP Water System Revenue Bonds Series AX and AY to advance refund portions of previous issuances. In prior years, the System has also defeased various bond issuances by depositing bonds proceeds in escrows and creating irrevocable trusts. The net proceeds from these advance refundings were used to purchase State and Local Government Securities (SLGS) and U.S. Treasury Securities to meet the requirements of the refunded debt. Those securities were deposited in irrevocable escrow trust accounts with the State Treasurer acting as escrow agent to provide for all future debt service on the bonds being refunded. As a result, those bonds are considered to be defeased, and the related liabilities have been excluded from the System's basic financial statements. At June 30, 2018 and 2017, outstanding Water System Revenue Bonds of \$653.8 million and \$817.1 million, respectively, are considered to be defeased.

In addition to GASB Statement No. 86, the System is required to disclose any remaining balance of previously defeased bonds that were defeased using its own existing resources. As of June 30, 2018 and 2017, the outstanding balance of bonds that were defeased using the System's own existing resources was \$22.3 million and \$29.3 million, respectively. The cash deposited to the escrow shall be deposited in Government Obligations, which prohibits investments in mutual funds or unit investment trusts.

On December 19, 2017, the System issued CVP Water System Revenue Bonds Series AX (tax-exempt) and Series AY (federally taxable) with an average yield of 5.2% to advance refund portions of previous issues. The bond proceeds with a par of \$491.5 million and premium of \$71.5 million, along with System funds on-hand in the amount of \$1.9 million were used to refund bonds with a par amount of \$531.2 million, fund \$32 million of future interest on the defeased bonds, and cover costs of issuance of \$1.5 million. The par amounts of the refunded bonds are as follows:

# **Bonds Refunded by Series AX & AY**

Bond Series	Refunded By	Tax Basis	Refunding Type	Refu	nded Par
Series AE	Series AY	Federally Taxable	ole Advance		29,050
Series AF	Series AY	Federally Taxable	Advance		72,630
Series AG	Series AY	Federally Taxable	Advance		19,350
Series AH	Series AY	Federally Taxable	Advance		10,210
Series Al	Series AY	Federally Taxable	Advance		4,865
Series AK	Series AX	Tax-Exempt	Advance		1,325
Series AN	Series AX	Tax-Exempt	Advance		9,890
Series AO	Series AX	Tax-Exempt	Current		238,290
Series AP	Series AX	Tax-Exempt	Advance		15,255
Series AQ	Series AX	Tax-Exempt	Advance		69,605
Series AR	Series AX	Tax-Exempt	Advance		60,785
Total				\$	531,255

Series AX & AY were issued to take advantage of lower interest rates. These transactions resulted in cash flow savings of \$34.7 million and economic gains (difference between the present values of the debt service payments on the old debt and new debt) of \$27.6 million. The refunding resulted in a difference between the book value of the old debt and the amount required to retire the debt of \$4.2 million. This difference is considered to be a deferred loss on the refunding and is being amortized over the original remaining life of the old debt or the life of the new debt, whichever is less, using the straight-line method.

Amortization of all deferred refunding costs was approximately \$10.1 million in fiscal 2018 and \$11.1 million in fiscal 2017.

# 8. Retirement Plan

The State is a member of the California Public Employees' Retirement System (CalPERS), an agent multiple-employer defined benefit pension plan. As an enterprise fund, the System is required under GASB 68 to report results pertaining to liability and asset information as of specific dates and within certain time frames. For this report, the following time frames apply:

■ Valuation Date June 30, 2016

June 30, 2017 Measurement Date

Measurement Period July 1, 2016 to June 30, 2017

#### **PLAN DESCRIPTION**

As a participant in the State of California's defined benefit pension plan, the System reports an allocated share of the total net pension liability reported by the State. Departments and agencies within the State of California, including the System, are in a cost-sharing arrangement in which all risks and costs are shared proportionately by participating State agencies. The System, for the most part has all its employees enrolled in the State Miscellaneous Plan. CalPERS functions as a common investment and administrative agent for participating public agencies within the State of California using the accrual basis of accounting. All state agencies are considered collectively to be a single employer, and the actuarial present value of vested and non-vested accumulated plan benefits attributable to the System's employees is determined as the System's percentage of the State as a single employer. Fiduciary net position available for benefits of the System's employees are also determined as the System's percentage of the State.

CalPERS issues a publicly available Comprehensive Annual Financial Report that includes financial statements and required supplementary information for CalPERS. CalPERS also issues the GASB 68 Accounting Valuation Report. Copies of these reports may be obtained by logging onto the CalPERS website at www.calpers.ca.gov.

#### BENEFITS PROVIDED AND EMPLOYEES COVERED

CalPERS provides retirement benefits, survivor benefits, and death and disability benefits based upon employee's years of credited service, age, and final compensation. Vesting occurs after five years of credited service except for second tier benefits, which require ten years of credited service. Most employees who retire at or after age 50 with five or more years of service are entitled to a retirement benefit. New members with service credit beginning on or after January 1, 2013 must be at least age 52. Benefits are payable monthly for the remainder of their lives. Health care and dental benefits, described in Note 9, may be provided to members depending on the date hired and the years of credited service of a member. Several survivor benefit options that reduce a retiree's unmodified benefit are available. Benefit provisions and all other requirements are established by State statute.

#### **CONTRIBUTIONS**

The contribution requirements of the plan members are established by State statute and the employer contribution rate is established and may be amended by CalPERS. Section 20814(c) of the California Public Employees' Retirement Law (PERL) requires that the employer contribution rates for all public employers be determined on an annual basis by the actuary and shall be effective on the July 1 following notice of a change in the rate. The total plan contributions are determined through the CalPERS' annual actuarial valuation process. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year with an additional amount to finance any unfunded accrued liability. The employer is required to contribute the difference between the actuarially determined rate and the contribution rate of the plan members or employees. These rates reflect PERL Section 20683.2, which mandates that certain employees contribute more as of July 1, 2013. Furthermore, any reduction in employer contributions due to the increase in the employee contributions must be paid by the employer toward the unfunded liability. The System's total employer contributions were \$58.3 million and \$51.6 million for the fiscal years ended June 30, 2018 and 2017, respectively.

The following table shows the average active employee and the employer contribution rates for the State Miscellaneous and State Industrial plans applicable to the System as a percentage of annual pay for the measurement period ended June 30, 2017 and 2016.

Contribution Rates							
	June 30,	2017	June 30, 2016				
	State Miscellaneous	State Industrial	State Miscellaneous	State Industrial			
Average active employee rate	6.737%	7.858%	6.669%	7.807%			
Employer rate of annual payroll	26.734%	19.246%	25.153%	18.656%			
Total	33.471%	27.104%	31.822%	26.463%			

#### **ACTUARIAL METHODS AND ASSUMPTIONS**

The net pension liability at June 30, 2018 and 2017 was measured as of June 30, 2017 and 2016, respectively, by rolling forward the total pension liability using an annual actuarial valuation as of June 30, 2016 and 2015, respectively.

The total pension liabilities for the measurement dates of June 30, 2017 and 2016 were based on the following actuarial methods and assumptions:

#### **Actuarial Methods and Assumptions**

Actuarial Cost Method: Entry Age Normal in accordance with the requirements of GASB Statement No. 68

Actuarial Assumptions:

Discount Rate 7.15% in 2017 and 7.65% in 2016

Inflation 2.75%

Salary Increases Varies by Entry Age and Service

7.15% net of pension plan investment expense but without reduction for Investment Rate of Return:

administrative expenses; include inflation

Mortality rates are based on the 2014 CalPERS Experience Study adopted by Mortality Rate Table

the CalPERS Board and include 20 years of mortality improvements using

Scale BB published by the Society of Actuaries

Contract COLA up to 2.75% until the Purchasing Power Protection Allowance Post Retirement Benefit Increase

floor on purchasing power applies, 2.75% thereafter

All other actuarial assumptions used in the June 30, 2016 and 2015 valuations were based on the results of an actuarial experience study for the period from 1997 to 2011, including updates to salary increase, mortality, and retirement rates. The Experience Study report may be accessed on the CalPERS' website under Forms and Publications.

#### **CHANGE OF ASSUMPTIONS**

For the measurement date of June 30, 2017, the discount rate decreased from 7.65% to 7.15%. There was no change of assumption for the measurement date of June 30, 2016.

#### **DISCOUNT RATE**

The discount rate used to measure the total pension liability at June 30, 2017 and 2016 measurement dates was 7.15% and 7.65%, respectively. To determine whether the municipal bond rate should be used in the calculation of a discount rate for each plan, CalPERS stress tested plans that would most likely result in a discount rate that would be different from the actuarially assumed discount rate. Based on the testing of the plans, the tests revealed the assets would not run out. Therefore, the discount rate used at June 30, 2017 and 2016 measurement dates was appropriate, and the use of the municipal bond rate calculation was not deemed necessary. The long-term expected discount rate of 7.15% and 7.65% at June 30, 2017 and 2016 measurement dates, respectively, was applied to all plans in the Public Employees Retirement Fund. The stress test results are presented in a detailed report "GASB Crossover Testing Report" that can be obtained at the CalPERS' website.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class.

In determining the long-term rate of return, CalPERS took into account both short-term and long-term market return

expectations, as well as the expected pension fund cash flows. Such cash flows were developed assuming that both members and employers will make their required contributions on time and as scheduled in all future years. Using historical returns of all the fund's asset classes, expected compound (geometric) returns were calculated over the shortterm (first 10 years) and the long-term (11-60 years) using a building-block approach. Using the expected nominal returns for both short-term and long-term, the present value of benefits was calculated for each fund. The expected rate of return was set by calculating the single equivalent expected return that arrived at the same present value of benefits for cash flows as the one calculated using both short-term and long-term returns. The expected rate of return was then set equivalent to the single equivalent rate calculated above and rounded down to the nearest 1/4 of 1%.

The table below reflects long-term expected real rate of return by asset class. The rate of return was calculated using the capital market assumptions applied to determine the discount rate and asset allocation.

## **Long-Term Expected Rate of Return by Asset Class**

		Current Target Allocation		rn Years ) <sup>1</sup>	Real Return Years 11+ <sup>2</sup>		
Asset Class	2017	2016	2017	2016	2017	2016	
Global Equity	47.0%	47.0%	4.90%	5.25%	5.38%	5.71%	
Global Fixed Income	19.0%	19.0%	0.80%	0.99%	2.27%	2.43%	
Inflation Sensitive	6.0%	6.0%	0.60%	0.45%	1.39%	3.36%	
Private Equity	12.0%	12.0%	6.60%	6.83%	6.63%	6.95%	
Real Estate	11.0%	11.0%	2.80%	4.50%	5.21%	5.13%	
Infrastructure and Forestland	3.0%	3.0%	3.90%	4.50%	5.36%	5.09%	
Liquidity	2.0%	2.0%	-0.40%	-0.55%	-0.90%	-1.05%	
	100.0%	100.0%					

<sup>&</sup>lt;sup>1</sup>An expected inflation of 2.5% used for this period

# SENSITIVITY OF THE NET PENSION LIABILITY TO CHANGES IN THE DISCOUNT RATE

The following presents the net pension liability of the System's proportionate share of the Plan as of the June 30, 2017 and 2016 measurement dates, calculated using the discount rate of 7.15% and 7.65%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage-point lower or 1 percentage-point higher than the current rate:

<sup>&</sup>lt;sup>2</sup>An expected inflation of 3.0% used for this period

Sensitivity of the Net Pension Liability to Changes in the Discount Rate									
		2017		2016					
Discount Rate -1%		6.15%		6.65%	_				
Net Pension Liability	\$	816,154	\$	757,948					
Current Discount Rate		7.15%		7.65%					
Net Pension Liability	\$	630,912	\$	556,748					
Discount Rate +1%		8.15%		8.65%					
Net Pension Liability	\$	436,546	\$	387,836					

#### PENSION PLANS FIDUCIARY NET POSITION

Detailed information about the pension plan's fiduciary net position is available in the separately issued CalPERS financial report and the State of California financial report.

# PENSION LIABILITIES, PENSION EXPENSE AND DEFERRED OUTFLOWS AND DEFERRED INFLOWS OF RESOURCES **RELATED TO PENSIONS**

As of June 30, 2018 and 2017, the System reported a net pension liability of \$630.9 million and \$556.7 million, respectively, for its proportionate share.

The net pension liability at June 30, 2018 and 2017 was measured as of June 30, 2017 and 2016, respectively, by rolling forward the total pension liability using an annual actuarial valuation as of June 30, 2016 and 2015, respectively. The System's proportion of the net pension liability was based on the System's pensionable compensation relative to the pensionable compensation of the State Miscellaneous plan members, as calculated by the State Controller's Office (SCO). The System's proportionate share of the net pension liability as of June 30, 2017 and 2016 was 1.7268% and 1.6813%, respectively.

For the year ended June 30, 2018 and 2017, the System recognized pension expense of \$92.5 million and \$64.7 million, respectively.

At June 30, 2018 and 2017, the System has deferred outflows and deferred inflows of resources related to pensions as follows:

# **Deferred Outflows of Resources and Deferred Inflows of Resources**

	2018				2017			
		red Outflows Resources	20.0	erred Inflows Resources		red Outflows Resources		rred Inflows Resources
System contribution subsequent to the measurement date	\$	119,175	\$	-	\$	51,594	\$	-
Changes in proportion		17,155		(7,584)		8,723		(10,113)
Changes of assumptions		73,403		-		-		-
Differences between expected and actual experience		2,764		(5,888)		5,682		(1,278)
Net differences between projected and actual earnings on pension plan investments		17,896		-		61,503		-
Total	\$	230,393	\$	(13,472)	\$	127,502	\$	(11,391)

The System reported \$119.2 million and \$51.6 million as deferred outflows of resources related to contributions subsequent to the measurement date of June 30, 2017 and 2016, respectively, will be/was recognized as a reduction of the net pension liability in the fiscal years ended June 30, 2019 and 2018, respectively. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized as pension expense as follows:

## Amortization of Deferred Outflows/(Inflows)

Year Ended June 30:	Deferred Outflows/(Inflows) of Resources				
2019	\$	28,124			
2020		45,358			
2021		30,526			
2022		(6,262)			
Total	\$	97,746			

# 9. Postemployment Benefits Other Than Pensions

#### PLAN DESCRIPTION AND BENEFITS PROVIDED

As a participant in the State of California's defined benefit other postemployment benefits plan, the System reports an allocated share of the total net OPEB liability reported by the State. Departments and agencies within the State, including the System, are in a cost-sharing arrangement in which all risks and costs are shared proportionately by participating State agencies. The State of California provides medical benefits to retired state employees and dependents through the California Public Employees' Retirement System (CalPERS) under the Public Employees' Medical and Hospital Care Act, and dental benefits under the State Employees' Dental Care Act. The State, and certain bargaining units and judicial employees (valuation groups) have agreed to prefund healthcare benefits. Assets are held in separate accounts by valuation group within the California Employers' Retiree Benefit Trust (CERBT), an agent multiple-employer defined benefit other postemployment benefits plan administered by CalPERS. Assets within each valuation group benefit retirees and dependents associated with that valuation group. CalPERS issues a publicly available comprehensive annual financial report that includes financial statements for its CERBT Fund. Copies of these reports may be obtained by visiting the CalPERS website at www.calpers.ca.gov.

To be eligible for these benefits, employees must retire after attaining certain age and length of service requirements. In accordance with the California Government Code, the State generally pays 100% of the health insurance premium cost for retirees, plus 90% of the additional premium required for dependents. The State generally pays all or a portion of the dental insurance premium cost for retirees, depending upon the completed years of credited state service at retirement and the coverage selected by the retiree.

As a participant in the State of California's defined benefit other postemployment plan, the System reports an allocated share of the total net OPEB liability reported by the State.

#### **CONTRIBUTIONS**

The contribution requirements of plan members and the State are established and may be amended by the Legislature. The annual contribution is based on the actuarially determined contribution. The System's allocated share of the contribution was \$21.0 million for fiscal year 2018.

#### ACTUARIAL METHODS AND ASSUMPTIONS

For the measurement period ended June 30, 2017, the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation dated June 30, 2017, based on the following actuarial methods and assumptions:

Actuarial Cost Method: Entry age normal in accordance with the requirements of GASB Statement No. 75

Actuarial Assumptions:

Blended rate for each valuation group, consisting of 7.28% Discount Rate

when assets are available to pay benefits, otherwise 20-year

Municipal G.O. Bond AA Index rate of 3.56%

Inflation 2.75%

Salary Increases Varies by entry age and service

Investment Rate of Return: 7.28% net of OPEB plan investment expenses

Healthcare Cost Trend Rates Pre-Medicare coverage: 8.00% for 2019 decreasing to 4.50%

for 2026 and later

Post-Medicare coverage: 8.5% for 2019 decreasing 4.50% for

2027 and later

Dental coverage: 4.50% thereafter

Mortality Rate Table Mortality rates are based on the 2014 CalPERS Experience Study adopted by

the CalPERS Board and include 20 years of mortality improvements using

Scale BB published by the Society of Actuaries

The mortality table used was developed based on CalPERS' specific data. The table includes 20 years of mortality improvements using the Society of Actuaries Scale BB. For more details on this table, refer to the 2014 CalPERS Experience Study and Review of Actuarial Assumptions report (Experience Study) for the period from 1997 to 2011. Other demographic assumptions used in the June 30, 2017 valuation were based on the results of the Experience Study, including updates to termination, disability, mortality assumptions, and retirement rates. The Experience Study report can be obtained from CalPERS' website, at www.CalPERS.ca.gov.

Healthcare related assumptions such as plan participation, aging factors, adjustments for disabled members, and adjustments for children of current retirees and survivors are based on the 2015 experience study performed by Gabriel, Roeder, Smith and Company (GRS) for the period from 2007 to 2014. Other healthcare assumptions such as member healthcare plan selection, coverage and continuance, select and ultimate healthcare cost trend rates, and per capita claim costs and expenses, are based on the most current information available. To obtain a copy of the GRS experience study please email the State Controller's Office, State Accounting and Reporting Division, at StateGovReports@sco.ca.gov.

#### **DISCOUNT RATE**

The discount rate used to measure the total OPEB liability was based on a blended rate for each valuation group. The blended rate used to measure the June 30, 2017 total OPEB liability consists of the 20-year Municipal G.O. Bond AA Index rate of 3.56% as of June 30, 2017, as reported by Fidelity Index, when prefunding assets are not available to pay benefits, and 7.28% when prefunding assets are available to pay benefits. The cash flow projections used to calculate the blended discount rate were developed assuming that prefunding agreements in which actuarially determined normal costs are shared between employees and the State will continue and that the required contributions will be made on time and as scheduled in future years. The prefunding agreements are subject to collective bargaining and legislative approval. Detailed information on the blended discount rates by valuation group is available in the State of California Retiree Health Benefits Program GASB Nos. 74 and 75 Actuarial Valuation Report as of June 30, 2017, on the State Controller's Office website, at www.SCO.ca.gov.

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which expected future real rates of return (expected returns, net of OPEB plan investment expense and inflation) are developed for each major asset class. Expected compound (geometric) returns were calculated over a closed period. Based on separate expected nominal returns for the short-term (first 10 years) and the long-term (11-60 years), a single expected return rate of 7.28% was calculated for years 1-60. If applied to expected cash flows during that period, the resulting present value of benefits is expected to be consistent with the present value of benefits that would be determined by applying the short and long-term expected rates to the same cash flows.

The following table reflects the long-term expected real rate of return by asset class.

Long-Term Expected Rate of Return by	Asset Class		
Asset Class	Target Asset Allocation	Real Return Years 1 - 10 <sup>1</sup>	Real Return Years 11 - 60 <sup>2</sup>
Global Equity	57.0%	5.25%	5.71%
Global Fixed Income	27.0%	1.79%	2.40%
Inflation Sensitive	5.0%	1.00%	2.25%
Real Estate	8.0%	3.25%	7.88%
Commodities	3.0%	0.34%	4.95%
	100%		

<sup>&</sup>lt;sup>1</sup>An expected inflation of 2.5% used for this period

<sup>&</sup>lt;sup>2</sup>An expected inflation of 3.0% used for this period

#### SENSITIVITY OF THE NET OPEB LIABILITY TO CHANGES IN THE DISCOUNT RATE

The following presents the net OPEB liability of the System's proportionate share of the Plan as of the June 30, 2017 measurement date, calculated using a blended discount rate that is one percentage point lower or one percentage point higher than the current rate:

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate									
	Blended Discount Rate -1%	Current Blended Discount Rate	Blended Discount Rate +1%						
Net OPEB Liability	\$ 1,076,245	\$ 912,912	\$ 782,607						

#### SENSITIVITY OF THE NET OPEB LIABILITY TO CHANGES IN THE HEALTHCARE COST TREND RATES

The following presents the net OPEB liability of the System's proportionate share of the Plan if it were calculated using a healthcare trend rate that is one percentage point lower or one percentage point higher than the current rate, for measurement period ended June 30, 2017:

Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rates						
	Healthcare Cost Trend Rates -1%	Current Healthcare Cost Trend Rates	Healthcare Cost Trend Rates +1%			
Net OPEB Liability	\$ 774,022	\$ 912,912	\$ 1,090,087			

#### **OPEB PLAN FIDUCIARY NET POSITION**

Detailed information about the OPEB plan's fiduciary net position is available in the separately issued California Employer's Retiree Benefit Trust (CERBT) Fund financial reports.

# OPEB LIABILITIES, OPEB EXPENSE AND DEFERRED OUTFLOWS AND DEFERRED INFLOWS OF RESOURCES **RELATED TO OPEB**

As of June 30, 2018, the System reported a net OPEB liability of \$912.9 million for its proportionate share.

For the measurement period ended June 30, 2017, the total OPEB liability was determined using a June 30, 2017 valuation date. The June 30, 2016 beginning total OPEB liability was determined by rolling back the June 30, 2017 total OPEB liability. The System's proportion of the net OPEB liability was based on the System's pensionable compensation relative to the pensionable compensation of all the valuation groups plan members, as calculated by the State Controller's Office.

For the year ended June 30, 2018, the System recognized OPEB expense of \$52.5 million. At June 30, 2018, the System has deferred outflows and deferred inflows of resources related to OPEB as follows:

erred Outflows of Resources and Deferred Inflows of Resources	 ed Outflows of esources	Deferred Inflows of Resources		
System contribution subsequent to the measurement date	\$ 21,016	\$	-	
Net differences between actual and expected contributions	237		-	
Changes in assumptions	-		(81,622)	
Net differences between projected and actual earnings on OPEB plan investments	-		(111)	
Total	\$ 21,253	\$	(81,733)	

The \$21 million reported as deferred outflows of resources related to contributions subsequent to the June 30, 2017 measurement date will be recognized as a reduction of the net OPEB liability during the fiscal year ending June 30, 2019. Other amounts reported as deferred outflows and inflows of resources related to OPEB will be recognized as expense as follows:

## **Amortization of Deferred Outflows/(Inflows)**

Year Ended June 30:	Deferred Outflows/(Inflows) of Resources			
2019	\$	(15,627)		
2020		(15,616)		
2021		(15,598)		
2022		(15,506)		
2023		(13,550)		
Therafter		(5,599)		
Total	\$	(81,496)		

# 10. Commitments and Contingencies

#### **COMMITMENTS**

### **Construction**

The System has entered into long-term construction contract commitments for the State Water Project facilities. The remaining value of contracts in process as of June 30, 2018 and 2017, were approximately \$38.4 million and \$57.5 million, respectively.

#### Power Transmission and Purchases

The System enters into contracts to purchase power as well as transmission service contracts to transmit power. Additionally, the System has expanded the power purchase portfolio to include solar energy and is exploring other potential renewable energies.

The System has long-term transmission service contracts with anticipated future payments of approximately \$91.9 million over periods ranging from one to 24 years. Payments made under these contracts approximated \$5 million and \$3.8 million for the years ended June 30, 2018 and 2017, respectively.

The System has long-term power purchase contracts with anticipated future payments of approximately \$580 million, which includes operation and maintenance expense, over periods ranging from one to 49 years. The remaining amounts of fixed obligations under the long-term power contracts as of June 30, 2018, are as follows:

Fixed Obligatio	ns						
_	Year	Transr	mission	P	ower	1	「otal
	2019	\$	4,989	\$	39,335	\$	44,324
	2020		4,989		30,446		35,435
	2021		4,989		29,185		34,174
	2022		4,989		29,185		34,174
	2023		4,989		29,185		34,174
	2023-2067		66,952		422,635		489,587
	Total	\$	91,897	\$	579,971	\$	671,868

The System has a contract with the Kings River Conservation District (the District) which provides the System all power generated by the Pine Flat Power Plant Project (the Project). Under the contract, the System is obligated to pay fixed amounts each year to cover the debt service on bonds issued by the District to build the Project, operations and maintenance expenses, and a charge for power supplied. Such payments are to be made until all of the bonds issued by the District to finance the Project have been retired in fiscal 2019. Payments to the District totaled approximately \$14.2 million and \$13.3 million during the years ended June 30, 2018, and 2017, respectively.

The amounts of the System's fixed obligations related to future principal and interest payments of the District's bonds as of June 30, 2018 are as follows:

### **Fixed Obligations**

Year	Total	
2019	\$	4,257

DWR entered into a Power Agreement with the Northern California Power Agency (NCPA) and other project participants in fiscal 2014 to participate in the Lodi Energy Center Project (LEC Project). The terms of the agreement provide that DWR pay for 33.5% of the construction and operating costs in exchange for receiving 33.5% of the power output of the LEC Project on a long-term basis. Participation in the LEC Project assists DWR in meeting SWP energy requirements, including the replacement of a portion of the energy previously provided by the Reid Gardner Project. NCPA issued revenue bonds for DWR's share of the costs to construct the power plant in Lodi, California in fiscal 2011. The Lodi Energy Center is one of the most efficient thermal-generating units in California, and will be economically dispatched before other older gas-fired units, resulting in power revenues that are sufficient to cover the operational costs and a portion of DWR's debt service on the bonds.

The amounts of the System's fixed obligations related to future principal and interest payments of the LEC Project's bonds as of June 30, 2018 are as follows:

## **LEC Bonds Fixed Obligations**

Year	T	otal
2019	\$	9,207
2020		9,209
2021		9,207
2022		9,209
2023		9,209
2024-2028		46,042
2029-2033		46,038
2034-2035		18,417
	\$	156,538

Market value information for certain power purchases, sales, and exchange contracts are disclosed at June 30, 2018 using forward market prices discounted at the prevailing risk-free interest rate. There are six purchase contracts expiring in fiscal 2019. The long-term energy purchase contracts involving energy delivered from Hoover Dam will expire in fiscal 2067; the Pine Flat Power Plants, Solar Star California XLIV and Solverde Solar energy purchase contracts will expire in

fiscal 2037; Dominion Solar Holdings purchase contract will expire in fiscal 2035; and two purchase contracts with the Water Contractor, Metropolitan Water District of Southern California (Metropolitan), will expire in fiscal 2020 and 2021. An exchange agreement with the NCPA, operator of the Lodi Energy Center Project, commits DWR to purchase power on a long-term basis subject to the agreement, but has no explicit termination date.

Power purchase commitments extending beyond June 30, 2018 are as follows:

Energy Commitments 2018			
	Number of Contracts	Total Capacity (MWh)	/alue at e 30, 2018
Energy purchases	6	225	\$ (422)
Long-term energy purchases	8	488	(248,025)
Total			\$ (248,447)

Power purchase commitments extending beyond June 30, 2017 are as follows:

Energy Commitments 2017				
	Number of Contracts	Total Capacity (MWh)	Value at ne 30, 2017	
Energy purchases	18	525	\$ (7,724)	
Long-term energy purchases	7	443	(351,732)	
Total			\$ (359,456)	

#### **CONTINGENCIES**

# **Litigation and Claims**

#### Monterey Amendment

In 1994, the System and certain Water Contractors adopted a set of principles pursuant to which additional amendments to the long-term water supply contracts have since been negotiated (Monterey Amendment). The Monterey Amendment includes provisions related to the transfer of land and related assets, known as the Kern Water Bank, to the Kern County Water Agency (KCWA) (one of the Water Contractors), the operation of certain System reservoirs, transfers of water allocations between Water Contractors, establishment of certain operating reserves, and the revision of calculating certain Water Contractor billings. The Monterey Amendment has been executed by the System and 27 of the 29 Water Contractors, who receive approximately 99% of water delivered annually and who pay approximately 99% of annual water supply revenues. Certain parties have disputed the Monterey Amendment by challenging the validity of the related Environmental Impact Report (EIR). While the courts have allowed the System to

proceed with the implementation of the Monterey Amendment, the System was required to prepare a new EIR. DWR completed the new Final EIR in February 2010 and filed its Notice of Determination in May 2010. In June 2010, two Delta water agencies and several environmental organizations and individuals filed a lawsuit in Sacramento Superior Court challenging DWR's California Environmental Quality Act (CEQA) compliance and the validity of the Monterey Amendment, including DWR's transfer of the Kern Fan Element to the KCWA. In July 2010, the same plaintiffs in the Sacramento Superior Court case filed a lawsuit in Kern County Superior Court challenging the transfer of the Kern Fan Element from KCWA to the Kern Water Bank Authority, a local joint powers agency which now has responsibility for the management of the Kern Fan Element and Kern Water Bank. In addition, in June 2010, two water districts in Kern County filed a separate lawsuit in Kern County Superior Court, primarily challenging DWR's CEQA compliance with respect to the Kern Fan Element transfer from DWR to KCWA. The two lawsuits filed in Kern County Superior Court were transferred to the Sacramento Superior Court. In December 2012, DWR prevailed on its challenge to the plaintiffs' validation causes of action (including the validity of the Kern Fan Element transfer) on the grounds that they were not filed timely. This left only the plaintiffs' CEQA compliance challenge. After holding a hearing on the CEQA challenges in the remaining two cases, the trial court ruled that most of the EIR was adequate under CEQA, but that the EIR's discussion of impacts on continued use and operation of the Kern Water Bank was deficient.

In October 2014, the Court ordered DWR, as the remedy for the deficiency, to provide additional environmental analysis on the impacts of the continued use and operation of the Kern Water Bank in a revised EIR and upon completion of the revised EIR, to determine whether to continue the use and operation of the Kern Water Bank by the Kern Water Bank Authority. The court limited its decision to the Kern Water Bank by ruling that only those portions of the revised EIR that are new or changed shall be subject to challenge under CEQA. In December 2014, one set of plaintiffs filed an appeal with the Court of Appeal regarding the trial court's final CEQA and validation decisions. In September 2016, the Department issued the revised EIR in compliance with the trial court's decision. Shortly thereafter, one set of plaintiffs, as well as a new party, filed a new action challenging the revised EIR. The new action challenges the Department's certification of the revised EIR and approval of the "Kern Water Bank Development and Continued Use and Operation" project. In October 2017, the trial court ruled in favor of the System and in December 2017, the plaintiffs appealed that ruling. The System, however, does not believe that there will be any material adverse impact on the System's financial position or results from operations, even if these lawsuits are successful.

Other Claims by Water Contractors, Including Claims Concerning Charges for Recreation and Fish and Wildlife Enhancement In accordance with the long-term water supply contracts, in December 2005, 27 Water Contractors and entities representing Water Contractors filed "Notices of Contest" with the System challenging the accuracy of various charges in the System's billings. One Water Contractor also filed a claim based on its Notice of Contest with the Victim Compensation and Government Claims Board. The System has been reviewing these Notices of Contest and investigating the items raised.

One item that has been determined to have merit, contested the System's practice of charging the Water Contractors for certain financing costs of the recreation and fish and wildlife enhancement portion of facilities financed with Water System Revenue Bonds. The System rectified the situation by restating past bills to provide appropriate credits back to the Water Contractors for the contested charges and taking other actions to pay for the costs of the recreation and fish and wildlife

enhancement portion of System facilities with sources other than charges to the Water Contractors. Such actions included DWR entering into Tolling and Waiver Agreements in 2007 and 2008 with the 27 Contractors who signed the Monterey Amendment, which included certain waivers allowing DWR to resume issuing revenue bonds in May 2008.

In addition to waivers included in the 2007 and 2008 Tolling and Waiver Agreements, which helped to facilitate the resumption of the sale of System Revenue Bonds, the Tolling and Waiver Agreements, as amended, also tolled (i.e. suspended) until December 31, 2019 the running of the time period and statute of limitations for filing by the Water Contractors of (1) protests regarding the System's bills to the Water Contractors for the years 2007 through 2020, (2) claims arising from the System's revisions to prior year invoices that were made to adjust for improper charges to the Water Contractors for recreation and fish and wildlife enhancement costs, and (3) certain other specified claims. The Tolling and Waiver Agreements also tolled the running of the time period for bringing an action on the Victim Compensation and Government Claims Board claim regarding the 2006 invoice that was filed by one of the Water Contractors. In the meantime, the System and Water Contractors are continuing their efforts to resolve issues that are covered by the Tolling and Waiver Agreement. However, no assurance can be given that the Water Contractors will not file additional Notices of Contest, claims and/or lawsuits with respect to the issues under discussion once the Tolling and Waiver Agreements expire.

### Federal Energy Regulatory Commission Proceedings

There are a number of proceedings pending before the Federal Energy Regulatory Commission (FERC) that may impact the cost of System operations. Some of these proceedings address requests from the California Independent System Operator (CAISO), investor-owned utilities, and others to increase or adjust rates or allocate responsibility for costs for transmission and other services provided to the System and other entities in California. The System is participating in these proceedings, since the outcome of these proceedings has the potential to increase the System's annual power costs. However, the System does not believe that any increased charges arising from these proceedings will materially impact the System's financial position or changes in financial position. Any increased charges will be passed through to the Water Contractors under the long-term water supply contracts in the form of higher operations charges.

#### 2017 - Oroville Dam Spillway Emergency and Feather River Flooding

As described in Note 15, "Significant Events," historical amounts of rainfall occurred in January and February 2017 causing widespread flooding throughout California, including in the Oroville and Feather River area. As further described in Note 15, during the storms and rainfall, significant damage occurred to both the control spillway and emergency spillway at Oroville Dam. As a result, DWR operated the control spillway and Dam facilities to address this situation. In addition, because of a concern about the potential failure of the emergency spillway, the Butte County Sheriff issued an evacuation order for Oroville and the surrounding communities on February 12, 2017. The evacuation order was lifted on February 14, 2017. A number of claims and lawsuits have been filed as a result of these events.

Approximately 400 claims were filed with the Government Claims Program in the Department of General Services. This program was formerly a program within the Victims Compensation and Government Claims Board. Most of the claims were filed by individuals and businesses claiming damages resulting from their compliance with the February 12, 2017, Butte County Sheriff's evacuation order. The Government Claims Program has been rejecting these claims, which requires the

claimants to file a lawsuit within six months of the rejection to pursue their claims in court.

A lawsuit has been filed as a class action on behalf of approximately 188,000 potential class members residing in areas along the Feather River, including Oroville, Marysville, and Yuba City. This suit alleges, among other things, that property values have decreased due to the proximity to the Oroville Dam and that other costs were incurred in complying with the emergency evacuation order. The City of Oroville and the County of Butte have each filed separate lawsuits seeking damages to reimburse each such public entity for costs and losses they claim they suffered as a result of the response and evacuation at Oroville. Other lawsuits have been filed by agricultural land owners and other land owners whose property adjacent to the Feather River was flooded. These lawsuits allege, among other things, that DWR's operation of the Oroville Dam facilities caused damages to their property and agricultural crops. All of the above lawsuits have been or are expected to be coordinated for purposes of pre-trial activities and the coordinated cases have been transferred to the Sacramento County Superior Court.

In addition, Pacific Gas and Electric Company filed a lawsuit seeking reimbursement and damages for costs it incurred to relocate electric facilities and to engineer and construct temporary electric facilities in the vicinity of Oroville Dam during the emergency. The County of Butte also filed a lawsuit seeking civil penalties of up to \$51 billion for an alleged violation of the Fish and Game Code arising from the release of sediment into the Feather River during the emergency, which will be vigorously contested by the Department. The eventual outcome of these lawsuits is uncertain. The Department, however, believes that these claims and lawsuits will not have a material adverse effect on its ability to continue to operate and maintain the System.

#### General

The System, during the ordinary course of its operations, has been named in a number of additional suits and claims, several of which are still pending.

In the opinions of management and the System's Legal Counsel, such legal actions will not have a material effect on the System's financial position or changes in financial position. If incurred, such costs would be recoverable from project beneficiaries under the long-term water supply contracts.

#### California WaterFix

In 2006, the DWR, the U. S. Bureau of Reclamation (USBR), Department of Fish and Wildlife (DFW), federal and state fish and wildlife agencies, and the agencies that purchase water from DWR and the USBR began a planning process to promote and improve the overall ecological health of the Delta and the species that inhabit the Delta. This resulted in the proposed Bay Delta Conservation Plan (BDCP). The BDCP eventually transitioned to the California WaterFix.

In April 2015, DWR and State and federal agencies decided to consider additional alternatives to the BDCP and announced a change in the proposed project to accomplish the dual goals of improving the ecological health of the Delta and securing reliable water supplies. Under the new proposed project, referred to as California WaterFix, implementation of new water conveyance facilities would be authorized under the different provisions of the Endangered Species Act (ESA) and California Endangered Species Act (CESA). California WaterFix consists of an underground conveyance facility, three northern Delta intakes, and mitigation measures and environmental

commitments to meet the requirements of California Environmental Quality Act (CEQA), National Environmental Policy

Act (NEPA), Section 7 of ESA, and Section 2081 of CESA and other environmental requirements.

DWR and USBR issued a final Environmental Impact Report (EIR) and Environmental Impact Statement, respectively, in December 2016. On July 21, 2017, DWR certified the final EIR, adopted findings and a statement of overriding considerations, adopted the Mitigation, Monitoring and Reporting Program for the Bay Delta Conservation Plan/ California WaterFix, and approved the California WaterFix. The Notice of Determination (NOD) was filed with the Office of Planning and Research on July 21, 2017, as well.

Eighteen separate lawsuits were filed challenging the Department's decision under CEQA. Several of these lawsuits included causes of action against DFW regarding issuance of an incidental take permit to the Department under CESA. DWR has conducted settlement meetings with these plaintiffs, with one lawsuit being settled, and is now addressing the preparation of the administrative record for the CEQA litigation process. On the same day as the filing of the NOD, DWR filed a validation action in Sacramento County Superior Court to confirm the validity of a proposed financing approach for the California WaterFix, which may involve the Department issuing bonds that are not issued under the Resolution or secured by Revenues but instead are issued under a separate authorizing resolution and are secured by a separate payment stream paid by the Water Contractors. Numerous entities and organizations supporting and opposing the California WaterFix have filed answers to this action. The validation action has been coordinated with the previously described CEQA and CESA lawsuits in Sacramento County Superior Court.

In August 2015, DWR and USBR filed a joint petition with the State Water Resources Control Board (SWRCB) to add three new points of diversion and rediversion under existing water right permits. Changes to the Department's water rights are required for the construction of new intakes for the proposed California WaterFix. The hearing is being conducted in two parts, the first addressing potential effects of the change on agricultural, municipal and industrial uses of water and the second focusing on fish and wildlife, recreational uses and the consideration of appropriate Delta flow criteria. The hearing on part one began in July 2016. Numerous entities/parties opposing the proposed project filed protests with the SWRCB and are participating in the hearing. DWR and the USBR are discussing settlements with some of the entities/parties, which will reduce the number of issues in, and time expected for, the hearing. Part one was completed in July 2017, while part two of the hearing began in February 2018 and concluded in August 2018.

In his first State of the State Address, delivered on February 12, 2019, Governor Newsom laid out a new direction for delta conveyance and expressed support for a revised conveyance project consisting of a single tunnel. DWR is assessing the nature and extent of any new permit and planning work that may be necessary as a result of the Governor's statements. On March 1, 2019, DWR filed a request for continuance and stay of the water rights proceeding. The lawsuits and other matters described above in regard to the California WaterFix may also be impacted as a result of the Governor's statements, however, the specific effect on any particular matter is unknown at this time.

## **Pollution Remediation**

Pollution remediation obligations are recorded by the System when an obligating event occurs, as defined in GASB Statement No. 49, and if a reasonable estimate of the remediation costs can be made. These liabilities are measured using either actual contract costs, where no change in cost is expected, or the estimated remediation costs, offset by

estimated recoveries from other responsible parties and expenditures incurred to date. Estimated remediation costs are subject to change over time. Estimated costs are revised for updated technology, changes in potential responsible parties, results of environmental studies, changes in statutes or regulations, price fluctuations and other factors.

Six different locations require pollution remediation, including previously-owned Reid Gardner Unit 4 in Nevada, Methyl Mercury Control programs in the Delta, and landfill sites at Banks Pumping Plant, Pearblossom O&M Center, Oroville Wildlife Area southwest of Oroville, and Del Valle Pumping Plant. In addition, the liability for pollution remediation includes the GHG emissions credits to be surrendered to California Air Resources Board (CARB). The following table presents the pollution remediation liability for the years ended June 30, 2018 and 2017:

D-I		Remer	in Air and	1::	141
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	2018 \$ 22,520		2	017
Reid Gardner Power Plant			\$	23,800
Delta Mercury Control Program		6,316		7,198
Green House Gas Emissions Credits		10,859		11,118
Banks Pumping Plant		6,100		-
Pearblossom O&M Center		2,318		-
Oroville Wildlife Area		1,284		-
Del Valle Pumping Plant		471		-
Total Liabilities		49,868		42,116
Less current portion		(8,557)		(4,207)
Total Long-term liabilities	\$	41,311	\$	37,909

#### Reid Gardner Power Plant

The Reid Gardner Power Plant ("RG"), located near Moapa, Nevada, was operated by Nevada Energy ("NVE") and consisted of four coal-powered generators—Units 1 through 4. DWR's ownership interest in Unit 4 of the Reid Gardner coal plant terminated in 2013, but the plant continued to generate electricity until early 2017. The remediation costs described below are being shared under an Environmental Agreement in proportion to DWR's ownership interest, executed along with the Termination Agreement between NVE and DWR, in 2013.

In February 2008, NVE entered into an Administrative Order on Consent ("AOC") with the Nevada Division of Environmental Protection ("NDEP"). Pursuant to the AOC, NVE agreed to undertake investigatory activities into various potential areas of contamination at RG and also to ultimately remediate groundwater, soils and other contamination at the RG facility, or mitigate adverse impacts. Groundwater and soils have been affected by certain constituents of concern associated with flue gas desulfurization effluent settlement in evaporation ponds. Since some of this contamination can be associated with the Unit No. 4 generation related facilities (such as the Unit 4 evaporation ponds) DWR has agreed to share the cost of NVE's investigatory activities, which may ultimately lead to the remediation measures prescribed by NDEP to NVE. These activities are projected to continue through at least 2032.

The System expended approximately \$1.3 million in fiscal 2018 and \$2.5 million in fiscal 2017. DWR expects to pay

# **Delta Mercury Control Program**

\$3.2 million of the total estimated financial liability during fiscal 2019.

In June 2011, the State Water Resources Control Board ("SWRCB") adopted an amendment to the Sacramento-San Joaquin Delta Basin Plan regarding the control of methyl mercury in the Delta. The amendment, among other provisions, assigns certain responsibilities jointly to DWR (with regard to both the System and DWR's flood management programs), the Central Valley Flood Protection Board and the State Lands Commission to reduce methyl mercury in the open waters of the Delta. In addition, DWR and others are assigned certain responsibilities regarding the discharge of methyl mercury from wetland and other aquatic restoration and enhancement projects. The System has expended approximately \$1.2 million for both years ended June 30, 2018 and 2017.

The State Water Resources Control Board ("SWRCB") is currently developing a statewide mercury regulation applicable to inland waters, including reservoirs. Once finalized, DWR will be responsible for meeting fish tissue and or water quality objectives statewide in DWR reservoirs identified by the regulation. Currently, nine DWR reservoirs have been identified by the SWRCB for regulation. However, there is insufficient information currently available to enable DWR to estimate the timing and magnitude or the System's share of potential compliance costs, if any, at this time.

#### **Green House Gas Emissions Credits**

The System is required to report and recognize the liability related to certain vintage years of the LEC Project under AB32. Each year the GHG allowances held in UPIS as an Intangible Asset, are evaluated and reported by the Power and Risk Analysis Office to CARB to be charged as pollution remediation expenses and a liability is recognized. The System's market analysis value of total compliance instruments to be surrendered is \$10.9 million. The System surrendered \$259,000 and \$883,000 of compliance instruments under this program during fiscal 2018 and 2017, respectively.

#### Other Construction Sites

During the construction of the System, DWR created at least three landfill sites for construction debris and waste, including the Harvey O. Banks Pumping Plant and Intake Channel, Pearblossom Pumping Plant Enlargement, and Oroville Wildlife Area. The landfill sites are closed and monitored by DWR. Two of the sites are routinely inspected by county officials. Remediation activities have not formally commenced at any of the three sites, however, DWR expects such activities to occur in the future. DWR will continue to refine estimated remediation liabilities associated with these three sites.

During the 1990s, DWR noted waste and debris at a fourth site, the Del Valle Pumping Plant, to be eroding from the bank of Arroyo Valle Creek and into the channel. Initial clean-up of surface debris was conducted in the spring of 1996 followed by slope stability, waste removal, and erosion control construction in July 1996. The site is listed as a closed landfill subject to periodic inspection by the Alameda County Department of Public Health, and DWR was identified as the responsible party for maintenance. Recent communication between Alameda County and Delta FD indicates potential regulatory action could occur soon. DWR will continue to refine the estimated remediation liability associated with this site.

# 11. Self-Insurance

The System is self-insured for all completed facilities of the SWP. The System is also self-insured for workers' compensation, general liability and other risks. All workers' compensation claims and other losses are on a pay-as-yougo basis. The Water Supply Contracts provide for recovery of such losses from the Water Contractors. Additionally, the CVP act and the related bond resolutions authorize the issuance of additional bonds, payable from available revenues or federal reimbursements under the National Disaster Act, for the purpose of providing funds for emergency repairs to power projects or water system projects necessitated by natural disasters, provided that certain conditions are met.

DWR has purchased automobile insurance for its fleet of vehicles through the California Department of General Services, Office of Risk & Insurance Management, and certain amounts are assessed to the System while some amounts may be directly charged for those vehicles owned specifically by the System.

# 12. Economic Dependency

The System's water supply revenue is generally derived from the 29 Water Contractors. The highest percentage of water supply revenues came from the Metropolitan Water District of Southern California. The following table shows total water supply revenues billed to Water Contractors including cover, refunds, and adjustments which exceeded 5% of the total water supply revenues sold by the System.

Water Supply Revenues					
	 2018	% Total	2017	% Total	
The Metropolitan Water District	\$ 563,746	50.30%	\$ 609,453	52.87%	
Kern County Water Agency	131,042	11.69%	131,484	11.41%	
Coachella Valley Water District	65,006	5.80%	-	-	
San Bernardino Valley MWD	-	-	58,102	5.04%	

The System sold power to 7 and 8 power entities during the years ended June 30, 2018 and 2017, respectively. The highest percentage of power revenues came from the CAISO. The following table shows power sales to entities which exceeded 5% of the total power sold by the System.

Power Sales						
	2	2018	% Total	2	2017	% Total
California Independent System Operator	\$	63,644	72.20%	\$	67,669	79.50%
Northern California Power Agency		17,638	20.01%		7,775	9.14%
Western Area Power Administration		6,209	7.04%		-	-
Exelon Generation Company LLC		-	-		5,764	6.77%

Similarly, the System purchased power from 19 and 17 power entities during the years ended June 30, 2018 and 2017, respectively. The highest percentage of power provided to the System came from the CAISO. The following table shows power purchases from entities which exceeded 5% of the total power purchased by the System.

Power Purchases				
	 2018	% Total	 2017	% Total
California Independent System Operator	\$ 236,195	69.04%	\$ 219,633	64.60%
Northern California Power Agency	25,805	7.54%	23,458	6.90%

# 13. Segment Information

The table below presents the condensed statements of net position, the statements of revenues, expenses and changes in net position and the statements of cash flows for the System's two segments, as of and for the years ended June 30, 2018 and 2017.

Segment							
	2018 Activities Allowed Under			2017			
				Activ	rities Allowed U	Jnder	
	Burns- Porter Act	Central Valley Project Act	Total	Burns- Porter Act	Central Valley Project Act	Total	
Condensed Statements of Net Position: Assets							
Current Assets	\$ 507,261	\$ 384,563	\$ 891,824	\$ 457,380	\$ 500,881	\$ 958,26	
Other Assets	1,930,872	231,212	2,162,084	1,192,052	326,775	1,518,82	
Capital Assets	775,429	3,934,573	4,710,002	792,169	3,281,493	4,073,66	
Total Assets Deferred outflows of resources	3,213,562	4,550,348	7,763,910	2,441,601	4,109149	6,550,75	
	251,646	149,380	401,026	107,571	175,114	282,68	
Total assets and deferred outflows of resources	\$ 3,465,208	\$ 4,699,728	\$ 8,164,936	\$ 2,549,172	\$ 4,284,263	\$ 6,833,43	
Liabilities Current liabilities	\$ 140,507	\$ 406,630	\$ 547,137	\$ 129,088	\$ 370,298	\$ 499,38	
Noncurrent liabilities	1,720,685	3,356,660		864,327	3,161,444		
Total liabilities	1,861,192	3,763,290		993,415			
Deferred inflows of resources	394,760	940,266		346,501	756,349		
Total liabilities and deferred inflows of resources	2,255,952	4,703,556		1,339,916	4,288,091	5,628,007	
Net position		(0.00, 0.04)	00/07/		//00 =00\		
Net investment in capital assets	1,130,157	(303,286)		1,148,262	(483,729)		
Restricted Total net position	79,099 1,209,256	299,458 (3,828)	378,557 1,205,428	60,994 1,209,256	<u>479,901</u> (3,828)	540,89 1,205,42	
Total liabilities, deferred inflows of resources,	1,209,230	(3,020)	1,203,420	1,209,230	(3,020)	1,203,42	
and net position	\$ 3,465,208	\$ 4,699,728	\$ 8,164,936	\$ 2,549,172	\$ 4,284,263	\$ 6,833,43	
Condensed Statements of Revenues , Expenses, and Char	nges in Net Positio	on:					
Operating revenues							
Water supply	\$ 840,698			\$ 841,470			
Power sales	88,112	36		85,053	36	,	
Federal and state reimbursements  Total operating revenue	21,081 949,891	21,046 256,622		22,430 948,953			
Depreciation and amortization Other operating expense	(20,987) (784,006)	(59,114) (36,157)	(80,101) (820,163)	(20,376) (841,938)	(56,889) (100,046)	(77,265 (941,984	
Income from operations	144,898	161,351	306,249	86,639			
Nonoperating revenues/expenses	144,070	101,331	300,247	00,037	117,432	204,07	
Capital revenues recovered (deferred), net	(84,466)	(191,280)	(275,746)	(67,956)	(62,191)	(130,147	
Interest expense	(3,404)	(102,025)		(5,149)			
Transfers In/(Out)	(62,864)	62,864		(16,336)	16,336		
Investment income (loss), net	5,836	9,517		2,802	6,210		
Other revenues (expenses), net		59,573		- (0.4.4.00)	22,812		
Total nonoperating revenues/expenses	(144,898)	(161,351)	(306,249)	(86,639)	(117,452)	(204,091	
Increase (decrease) in net position		-			-		
Net position, beginning of year Net position, end of year	1,209,256 \$ 1,209,256	(3,828) \$ (3,828)		1,209,256 \$ 1,209,256		1,205,42 \$ 1,205,42	
· · · · · · · · · · · · · · · · · · ·	<u></u> 1,207,230	<b>Φ</b> (3,020)	<u></u>	\$ 1,207,230	<b>Φ</b> (3,020)	\$ 1,203,42	
Condensed Statement of Cash Flows: Net cash provided by (used in)							
Operating activities	\$ 157,354	\$ 328,515	\$ 485,869	\$ 169,447	\$ 297,234	\$ 466,68	
Capital and related financing activities	(105,137)	(469,823)	(574,960)	(88,905)	(113,941)		
Investing activities	5,830	19,194	25,024	3,368	8,914	12,28	
Net (decrease) increase in cash and cash equivalents	58,047	(122,114)	(64,067)	83,910	192,207	276,11	
Cash and equivalents, beginning of year	396,632	546,114		312,722	353,907	666,62	
Cash and equivalents, end of year	\$ 454,679	\$ 424,000	\$ 878,679	\$ 396,632	\$ 546,114	\$ 942,74	

# 14. New Governmental Accounting Standards

### GASB Statement No. 75

In June 2015, the GASB issued Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pension. The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). It also improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. The requirements of GASB No. 75 are effective for fiscal year 2018 and thereafter. The financial statement items in connection with GASB No. 75 are presented in this fiscal year financial statements. A summary of the July 1, 2017 beginning balance item restated in connection with GASB Statement No. 75 is shown in the following table:

GSAB Implementations						
Statements of Net Position	Balance before GASB 75 adjustment at July 1, 2017		GASB 75 adjustment		July 1, 2017 adjusted beginning balance	
Total long-term assets  Amounts recoverable through future billings under long-term water supply contracts:  Operations and maintenance expense	\$	202,725	\$	679,545	\$	882,270
<b>Deferred outflows of resources</b> Employer contributions - OPEB		-		23,110		23,110
Total long-term liabilities  Postemployment benefits other than pension obligations  Long-term liability - net OPEB		(262,390)		262,390 (965,045)		- (965,045)
<b>Net position</b> Net investment in capital assets  Restricted		664,533 540,895		- -		664,533 540,895

#### GASB Statement No. 81

In March 2016, the GASB issued Statement No. 81, Irrevocable Split-Interest Agreements. The objective of this Statement is to improve accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement. The requirements of GASB No. 81 are effective for fiscal year 2018 and thereafter. It has been determined that GASB No. 81 did not impact the System.

### GASB Statement No. 83

In November 2016, the GASB issued Statement No. 83, Certain Asset Retirement Obligations. This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. The requirements of GASB No. 83 are effective for fiscal 2019 and thereafter. The System is currently evaluating the impact this Statement will have on its financial statements.

GASB Statement No. 84

In January 2017, the GASB issued Statement No. 84, Fiduciary Activities. This objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The requirements of GASB No. 84 are effective for fiscal 2020 and thereafter. The System is currently evaluating the impact this Statement will have on its financial statements.

#### GASB Statement No. 85

In March 2017, the GASB issued Statement No. 85, Omnibus 2017. The objective of this Statement is to address practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and applications, and postemployment benefits (pensions and other postemployment benefits [OPEB]). The requirements of GASB No. 85 are effective for fiscal year 2018 and thereafter. The financial statement items in connection with GASB No. 85 are presented in this fiscal year financial statements.

### GASB Statement No. 86

In May 2017, the GASB issued Statement No. 86, Certain Debt Extinguishment Issues. The primary objective of this Statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources resources other than the proceeds of refunding debt-are placed in an irrevocable trust for the sole purpose of extinguishing debt. The requirements of GASB No. 86 are effective for fiscal year 2018 and thereafter. The financial statement items in connection with GASB No. 86 are presented in this fiscal year financial statements.

#### GASB Statement No. 87

In June 2017, the GASB issued Statement No. 87, Leases. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. The requirements of GASB No. 85 are effective for fiscal year 2021 and thereafter. The System is currently evaluating the impact this Statement will have on its financial statements.

#### GASB Statement No. 88

In March 2018, the GASB issued Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements. The primary objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. The requirements of GASB No. 88 are effective for fiscal year 2019 and thereafter. The System is currently evaluating the impact this Statement will have on its financial statements.

### GASB Statement No. 89

In June 2018, the GASB issued Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period. The objectives of this Statement are (1) to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) to simplify accounting for interest cost incurred before

the end of a construction period. The requirements of GASB No. 89 are effective for fiscal year 2021 and thereafter. The System is currently evaluating the impact this Statement will have on its financial statements.

#### GASB Statement No. 90

In August 2018, the GASB issued Statement No. 90, Majority Equity Interests. The objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. The requirements of GASB No. 90 are effective for fiscal year 2019 and thereafter. The System is currently evaluating the impact this Statement will have on its financial statements.

# 15. Significant Events

After historical amounts of rainfall occurred in January and February 2017 causing widespread flooding throughout California, including in the Oroville and Feather River area, California Governor Edmund G. Brown issued four Proclamations of a State of Emergency between, January 23, 2017 and March 7, 2017, addressing areas of flooding and potential flooding throughout the State, including at Oroville Dam. In February 2017, after a particularly significant amount of rainfall, erosion was discovered on the lower chute of the control spillway at Lake Oroville and in the areas on the hillside beneath the emergency spillway.

Over the next several months of winter storms, the Department of Water Resources (the Department) successfully managed outflow and Lake Oroville levels while actively working to return both the control spillway and the emergency spillway to original design capacity. On November 1, 2017, the Department met its first milestone of repairing and reconstructing of the control spillway to handle the release of outflows up to 100,000 cubic feet per second. The control spillway is expected to reach its overall outflow capacity (based on its original design) by November 2018.

While the Oroville Dam itself has not shown any signs of adverse effects from the spillway incident and remains structurally sound, costs associated with the recovery and restoration efforts of the Oroville Dam spillways totaling approximately \$683.2 million as of June 30, 2018, are recorded in construction work in progress (CWIP).

In April 2017, President Donald J. Trump issued a Federal Major Disaster Declaration for areas in California affected by the severe storms and flooding, which will provide for, among other things, a federal contribution to the costs of the Department's emergency response activities and to the repair and replacement work at Oroville Dam. The Department received approximately \$69 million of approved Federal Emergency Management Agency (FEMA) Disaster Grant funds during fiscal 2018. This non-exchange disaster grant was used to mitigate response and recovery costs of the Oroville Spillway Emergency by paying-off commercial paper borrowings related to the ongoing emergency Oroville Spillway recovery and restoration capital costs. Additional FEMA disaster grants are anticipated to be received in subsequent years. The Department will continue to submit expenditures to FEMA for reimbursement. Adverse financial impact is not anticipated as any remaining Oroville Emergency Spillway short-term commercial paper liability amounts not reimbursed by FEMA, will be financed with long-term Revenue Bonds and be recovered through the capital charge to the State Water Project Contractors.

# 16. Subsequent Events

On September 5, 2018, the Department updated its cost estimates for the Oroville Dam Spillway Recovery and Restoration Project. The current estimate for emergency response and reconstruction of the control and emergency spillways is \$1.1 billion. Cost estimates were based on actual and projected work and may be adjusted further as work continues through completion of the project in 2019.

On October 18, 2018, the System issued tax-exempt, fixed rate CVP Revenue Bond, Series AZ, with a par amount of \$215.3 million and a premium of \$34.2 million. This was achieved through a negotiated sale to redeem \$129.7 million of commercial paper notes and to refund Series AF and AY. The System achieved a net present value savings of \$2.5 million, representing 2.26% savings of the refunded bonds. The final maturity of the Series AZ bonds will be 2035.



# REQUIRED SUPPLEMENTARY INFORMATION

Last 10 Years\* (in thousands)

Fiscal Year	2	018		2017		2016		2015
The System's proportion of the net pension liability	1.	.7268%		1.6813%		1.7191%		1.6927%
The System's proportionate share of the net pension liability	\$ 6	30,912	\$	556,748	\$	485,502	\$	426,935
The System's covered payroll	\$ 1	94,340	\$	188,680	\$	181,151	\$	164,571
The System's proportionate share of the net pension liability as a percentage of their covered payroll	32	24.64%		295.08%		268.01%		259.42%
Plan fiduciary net position as a percentage of the total pension liability	(	66.42%		66.81%		70.68%		73.05%
Measurement date:	June 3	30, 2017	Jur	ne 30, 2016	Jur	ne 30, 2015	Jur	ne 30, 2014

<sup>\* -</sup> Fiscal year 2015 was the 1st year of implementation, therefore only four years are shown.

Last 10 Years\* (in thousands)

Fiscal Year	2018	2017	2016	2015
Contractually required contribution	\$ 58,265	\$ 51,594	\$ 47,978	\$ 44,393
Contributions in relation to the contractually required contribution	119,175	51,594	47,978	44,393
Contribution deficiency (excess)	\$ (60,910)	\$ -	\$ -	\$ -
System's covered payroll	\$ 206,175	\$ 194,340	\$ 188,680	\$ 181,151
Contributions as a percentage of covered payroll	57.80%	26.55%	25.43%	24.51%

<sup>\* -</sup> Fiscal year 2015 was the 1st year of implementation, therefore only four years are shown.

Last 10 Years\* (in thousands)

Fiscal Year		2018	
The System's proportion of the net OPEB liability		1.0031%	
The System's proportionate share of the net OPEB liability	\$	912,912	
The System's covered payroll	\$	194,340	
The System's proportionate share of the net OPEB liability as a percentage of their covered payroll		469.75%	
Plan fiduciary net position as a percentage of the total OPEB liability		0.546%	
Measurement date:	Ju	ine 30, 2017	

<sup>\* -</sup> Fiscal year 2018 was the 1st year of implementation, therefore only one year is shown.

Last 10 Years\* (in thousands)

Fiscal Year	2018	
Actuarially determined contribution	\$	44,788
Contributions in relation to the actuarially determined contribution		21,016
Contribution deficiency (excess)	\$	23,772
System's covered payroll	\$	206,175
Contributions as a percentage of covered payroll		10.19%

<sup>\* -</sup> Fiscal year 2018 was the 1st year of implementation, therefore only one year is shown.



# SUPPLEMENTARY INFORMATION

## Calculation of Adequacy of Debt Service Coverage for the Central Valley Project Revenue Bonds

Debt Service Coverage				
	2018			2017
Water supply revenues, Central Valley Project Act	\$	235,540	\$	241,117
Add: Cover Collected as Proceeds Due to Water Contractors		56,305		56,321
Less: Devil Canyon Castaic Revenues		(21,451)		(20,392)
Revenues not available for Debt Service		(5,230)		(5,856)
Net CVP revenues available for debt service		265,164		271,190
Principal and interest for revenue bonds	\$	207,341	\$	199,619
Debt service coverage		127.9%		135.9%

Note: Section 805 of the general bond resolution for the Central Valley Project (CVP) Water System Revenue Bonds states, "The total amount of Revenues receivable under all Water Supply Contracts in any Year shall be the sum of (A) 1.36 times the Annual Debt Service for such Year to be paid from the Revenue Fund, plus (B) the amount estimated by DWR, pursuant to Section 605, to be required from the Revenue Fund in such Year to provide for Water System Operating Expenses ..."

The Supplementary Information, Calculation of Adequacy of Debt Service Coverage, for the Central Valley Project (CVP) Revenue Bonds is based on \$235.6 million in fiscal 2018 and \$241.1 million in fiscal 2017, respectively in Water Supply Revenues of the System's (CVP) segment.

In fiscal 2018, the revenues include: an increase of \$56.3 million in refundable proceeds, a decrease of \$21.5 million for principal and interest payments for the Devil Canyon Castaic Facilities Bonds (DCC) since the DCC General Bond resolution does not require cover to be collected for these bonds, and a decrease of \$5.2 million in miscellaneous revenue not available for debt service.

In fiscal 2017, the revenues include: an increase of \$56.3 million in refundable proceeds, a decrease of \$20.4 million for principal and interest payments for the Devil Canyon Castaic Facilities Bonds (DCC) since the DCC General Bond resolution does not require cover to be collected for these bonds, and a decrease of \$5.9 million in miscellaneous revenue not available for debt service.





# STATISTICAL SECTION

This part of the California State Water Resources Development System's comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements and note disclosures say about the government's overall financial health.



## Contents

These schedules contain trend information to help the reader understand how the System's financial performance a	anc
well-being have changed over time.	

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Schedule of Net Position by Component	1	14

#### **REVENUE CAPACITY**

These schedules contain information to help the reader access the System's two most significant local revenue sources, water supply and power sales.

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Summary of Schedule of Water and Power Sales Rates	116
Largest Distribution Water Revenue Accounts	117
Largest Distribution Power Sales Revenue Accounts	118

#### **DEBT CAPACITY**

These schedules present information to help the reader access the affordability of the System's current levels of outstanding debt and the System's ability to issue additional debt in the future.

Schedule of Ratios of Outstanding Debt by Type	119
Schedule of Debt Schedule Coverage	120

#### **DEMOGRAPHIC AND ECONOMIC INFORMATION**

These schedules offer demographic and economic indicators to help the reader understand the environment within which the System's financial activities take place.

Schedule of Demographic and Economic Indicators	121
Schedule of California Number of Employees by Industry	122

#### **OPERATING INFORMATION**

These schedules contain service and infrastructure data to help the reader understand how the information in the System's financial report relates to the services the System provides and the activities it performs.

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Capital Assets, Net	126

## Schedule of Changes in Net Position (Unaudited)

Last Ten Fiscal Years (in thousands)

	 2009	 2010	2011	2012
OPERATING REVENUES:				
Water supply	\$ 721,253	\$ 853,158	\$ 874,748	\$ 860,891
Power sales	175,318	165,664	193,154	148,360
Federal and State reimbursements	18,266	24,021	28,294	36,561
Total operating revenues	914,837	1,042,843	1,096,196	1,045,812
OPERATING EXPENSES:				
Operations and maintenance	466,708	435,801	428,559	526,402
Purchased power	206,632	212,658	342,446	271,377
Depreciation and amortization expense	79,632	80,813	100,257	87,400
Operating expenses recovered (deferred), net	21,257	189,000	118,325	67,063
Total operating expense	774,229	918,272	989,587	952,242
NET OPERATING INCOME (LOSS)	 140,608	 124,571	 106,609	 93,570
NONOPERATING REVENUES (EXPENSES):				
Capital revenues recorded (deferred), net	44,344	19,823	22,812	43,834
Interest expense	(131,481)	(151,390)	(134,996)	(107,770)
Other revenues (expenses), net	(53,471)	6,996	5,575	(29,634)
Total nonoperating revenues (expenses)	(140,608)	(124,571)	(106,609)	(93,570)
CHANGE IN NET POSITION	\$ <u>-</u>	\$ <u>-</u>	\$ -	\$ -

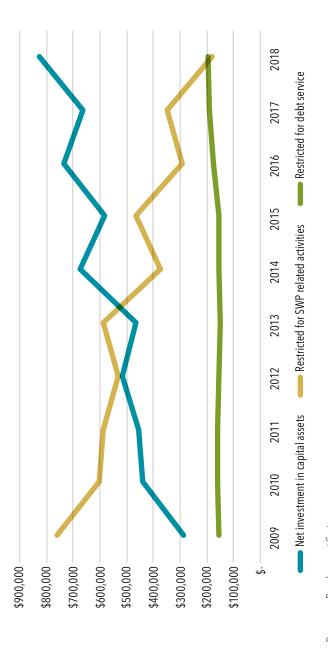
Schedule of Changes in Net Position (Unaudited)

Last Ten Fiscal Years (in thousands)

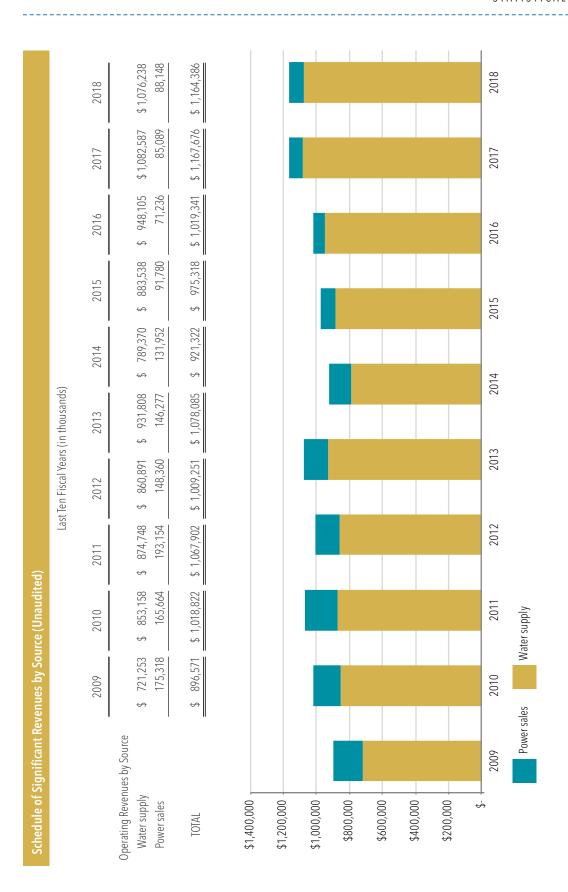
2	013	2	014	2	015	2	016 .	2017 -	:	2018
\$	931,808	\$	789,370	\$	883,538	\$	948,105	\$ 1,082,587	\$	1,076,238
	146,277		131,952		91,780		71,236	85,089		88,148
	52,397		52,186		44,060		67,309	55,664		42,127
	1,130,482		973,508		1,019,378		1,086,650	1,223,340		1,206,513
	545,413		557,209		404,627		511,926	544,925		566,620
	258,899		241,444		202,780		219,661	339,993		342,115
	85,236		68,896		81,495		77,170	77,265		80,101
	22,261						65,004	57,066		(88,572)
	911,809		867,549		688,902		873,761	1,019,249		900,264
	218,673		105,959		330,476		212,889	204,091		306,249
	(174,356)		(42,934)		(243,945)		(118,510)	(130,147)		(275,746)
	(53,492)		(115,499)		(96,082)		(106,978)	(105,768)		(105,429)
	9,175		52,474		9,551		12,599	31,824		74,926
	(218,673)		(105,959)		(330,476)		(212,889)	(204,091)		(306,249)
\$	<u>-</u>	\$		\$		\$	-	\$ 	!	\$ -

2009 <sup>a</sup> NET POSITION Net investment in capital assets \$ 286,318 Restricted for:	2009a 286,318	2010	\$ 6	2010 2011 441,809 \$ 455,265 \$	Ten Fiscal Years (in 2012 516,670 \$	ears (ii	Last Ten Fiscal Years (in thousands)  2012 2013 5 \$ 516,670 \$ 466,348 \$	₩	2014	<del>//</del>	2015	2016	₩	2017		2018
Debt service and plant replacements	156,802	159,508	œ	162,056	156,913	3	150,825		155,116		155,857	177,330		193,889	197,363	
ı	762,311	604,114	4	588,107	531,845	1   55 	588,255		375,976		464,262	291,895		347,006		181,194
↔	1,205,431	1,205,4	₩ ====================================	\$ 1,205,431       \$ 1,205,428	\$ 1,205,42	788 88	1,205,428		1,205,428	\$	,205,428	3 1,205,428	<b>⇔</b>	1,205,428	7,	205,428

a) For fiscal years 2009 through 2017, certain amounts previously dassified as net investment in capital assets were reclassified to restricted.



Source: State Water Resources Development System



Source: State Water Resources Development System

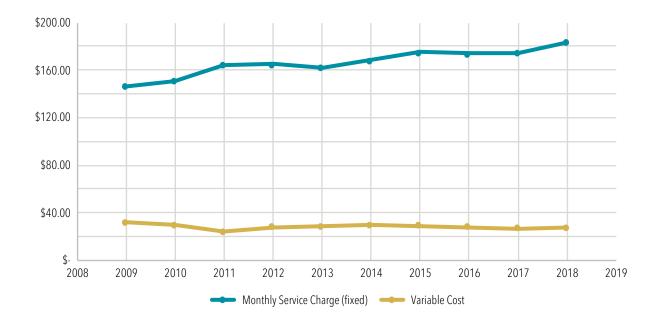
#### Summary of Schedule of Water and Power Sales Rates (Unaudited

Last Ten Years

				Water Su	oply <sup>a</sup>	
_	Financial Statement Year	<u>Calendar Year</u>	Month Charge	ly Service e (fixed) <sup>b</sup>	Variabl	e Cost <sup>b</sup>
	2009	2008	\$	144.41	\$	30.53
	2010	2009		148.49		28.33
	2011	2010		162.20		22.45
	2012	2011		162.64		26.36
	2013	2012		159.89		26.79
	2014	2013		166.37		28.21
	2015	2014		172.81		27.52
	2016	2015		171.99		26.34
	2017	2016 <sup>c</sup>		172.07		25.33
	2018	2017 <sup>c</sup>		181.06		25.78

a) Hypothetical charges, which, if assessed on all Table A of Bulletin 132 water delivered to date, all surplus water delivered prior to May 1, 1973, and all Table A water estimated to be delivered during the remainder of the project repayment period (Table B-5B of Bulletin 132), would provide a sum at the end of the period financially equivalent to all Transportation Charge and Delta Water Charge payments required under a water supply contract, considering interest at the Project Interest Rate, 4.610 percent per annum.

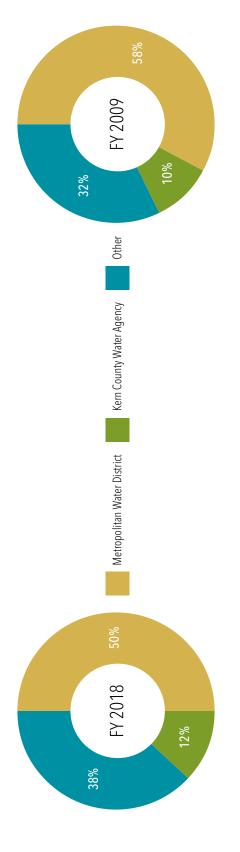
- b) Numbers reflect amounts on a Calendar Year basis
- c) Amounts for these years are preliminary and subject to change



Source: State Water Project Analysis Office Bulletin 132-xx Table B-24

## Percentage of Total<sup>a</sup> 28% 10% %89 Rank FY 2009 418,326,644 72,125,283 \$ 721,252,834 \$ 490,451,927 **Annual Water** Sales THE METROPOLITAN WATER DISTRICT KERN COUNTY WATER AGENCY Total Water Consumption Current Year and Nine Years Prior Subtotal Customer Percentage of Total<sup>a</sup> 62% 20% 12% Rank FY 2018 Largest Distribution Water Revenue Accounts (Unaudited) 563,745,764 131,042,241 \$ 694,788,005 \$ 1,076,237,998 Annual Water Sales THE METROPOLITAN WATER DISTRICT KERN COUNTY WATER AGENCY Total Water Consumption Subtotal Customer

a) Percentage of total is based on total revenues billed under the water supply contracts



Source: State Water Resources Development System

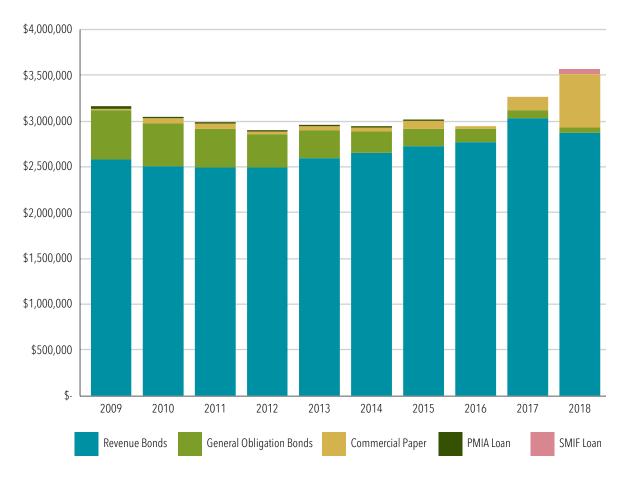
### Percentage of 11% Total 14% 25% Rank FY 2009 FY 2009 19,285,020 Annual Revenues \$ 24,544,571 43,829,592 \$ 175,318,367 75% CALIFORNIA INDEPENDENT SYSTEM OPERATOR Other California Independent System Operator Southern California Edison SOUTHERN CALIFORNIA EDISON Total Power Sales Current Year and Nine Years Prior Subtotal Customer Percentage of Northern California Power Agency 20% 92% Total 72% California Independent Largest Distribution Power Sales Revenue Accounts (Unaudited) System Operator Rank FY 2018 63,643,934 17,638,403 81,282,337 88,148,372 Annual Revenues Other \$ CALIFORNIA INDEPENDENT SYSTEM OPERATOR NORTHERN CALIFORNIA POWER AGENCY FY 2018 %8 Total Power Sales Subtotal 20% Customer

Source: State Water Resources Development System

## Schedule of Ratios of Outstanding Debt by Type (Unaudited)

Last Ten Fiscal Years (in thousands)

Fiscal Year	Rev	venue Bonds	General Obligation Bonds	Co	ommercial Paper	PN	/IIA Loan	SN	/IIF Loan	 Total
2009	\$	2,579,158	\$ 531,700	\$	9,897	\$	27,288	\$	-	\$ 3,148,043
2010		2,500,049	476,915		46,473		23,912		-	3,047,349
2011		2,491,854	420,540		54,578		21,055		-	2,988,027
2012		2,487,737	362,375		28,783		18,052		-	2,896,947
2013		2,594,459	302,920		50,505		14,896		-	2,962,780
2014		2,647,814	241,835		36,136		11,579		-	2,937,364
2015		2,724,008	184,960		87,900		8,094		-	3,004,962
2016		2,770,888	135,045		42,776		-		-	2,948,709
2017		3,026,368	88,300		147,165		-		-	3,261,833
2018		2,869,007	54,065		580,672		-		60,910	3,564,654

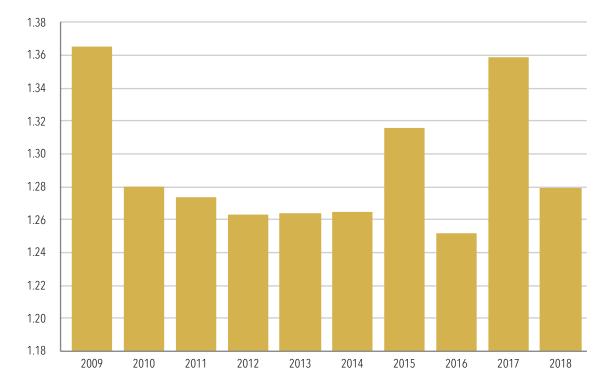


#### Schedule of Debt Service Coverage (Unaudited)

Last Ten Fiscal Years (in thousands)

Debt Service Requirements

Fiscal Year	er Supply venues	Collected ot Service	Avail	nues Not able for Service	Avai	Revenue lable for t Service	Principal	<u> </u>	Interest	Total	Coverage
2009	\$ 279,059	\$ 48,985	\$	64,522	\$	263,522	\$ 74,1	75	\$ 118,798	\$ 192,973	1.37
2010	279,660	54,086		62,579		271,167	93,2	70	118,516	211,786	1.28
2011	320,631	55,542		96,016		280,157	104,5	35	115,439	219,974	1.27
2012	307,438	56,385		85,448		278,375	111,5	55	108,900	220,455	1.26
2013	372,748	54,677		156,404		271,021	119,2	80	95,098	214,378	1.26
2014	281,461	51,786		72,829		260,418	109,6	10	96,313	205,923	1.26
2015	225,899	54,316		26,405		253,810	110,1	05	82,819	192,924	1.32
2016	255,106	57,779		28,325		284,560	130,0	95	97,255	227,350	1.25
2017	241,117	56,321		26,248		271,190	128,0	35	71,584	199,619	1.36
2018	235,540	56,305		26,681		265,164	132,0	50	75,291	207,341	1.28



## **Schedule of Demographic and Economic Indicators (Unaudited)**

Last Ten Years

Year	Population (in thousands)	al Income nillions)	Per Capita Inco	a Personal ome	Unemployment Rate
2008	36,856	\$ 1,602,749	\$	43,786	7.2%
2009	37,077	1,537,136		41,588	11.3%
2010	37,339	1,583,447		42,399	12.1%
2011	37,679	1,691,003		44,844	11.7%
2012	38,044	1,812,315		47,600	10.4%
2013	38,375	1,849,505		48,115	8.9%
2014	38,737	1,939,528		49,976	7.5%
2015	39,093	2,061,149		52,644	6.2%
2016	39,250	2,197,492		55,987	5.4%
2017	39,537	2,303,870		58,272	4.8%

<sup>1 -</sup> Source: Economic Research Unit, California Department of Finance

<sup>2 -</sup> Note: 2018 information is not available and therefore not presented

Schedule of California Number of Em	ployees by Indust	ry (Unaudited)			
	2008	2009	2010	2011	2012
Agriculture, Forestry, Fishing, Hunting	459,723	434,275	440,265	449,614	463,476
Mining	26,698	23,244	25,011	27,016	28,475
Utilities	58,575	60,288	57,175	58,199	59,160
Construction	782,432	601,982	562,922	580,550	609,365
Manufacturing	1,425,225	1,261,582	1,250,589	1,257,097	1,264,017
Wholesale Trade	705,036	636,330	647,193	661,757	679,339
Retail Trade	1,615,574	1,495,711	1,496,821	1,522,619	1,553,812
Transportation and Warehousing	432,622	396,512	397,932	404,582	415,488
Information	472,152	436,865	429,065	425,193	426,056
Finance and Insurance	563,136	528,813	509,852	512,160	522,529
Real Estate and Rental and Leasing	274,778	250,908	248,452	247,476	253,154
Services	6,232,695	5,947,240	6,063,638	6,216,242	6,519,084
Nonclassifiable Establishments	73,151	72,563	44,336	58,663	59,443
Federal, State and Local Government	2,405,547	2,352,014	2,302,160	2,276,153	2,260,320
Total for all Industries	15,527,344	14,498,327	14,475,411	14,697,321	15,113,718
	2013	2014	2015	2016	2017
Agriculture, Forestry, Fishing, Hunting	463,169	467,923	471,566	474,766	473,554
Mining	403,109 27,986	407,923 29,142	471,566 25,668	21,218	20,130
Utilities	58,240	57,829	57,577	58,008	57,766
Construction	656,000	691,811	748,872	789,841	830,446
Manufacturing	1,265,860	1,283,779	1,303,651	1,304,915	1,318,709
Wholesale Trade	702,319	713,642	719,576	718,853	723,984
Retail Trade	1,587,467	1,615,557	1,645,332	1,654,247	1,670,450
Transportation and Warehousing	433,112	455,070	488,428	517,790	553,571
Information	445,121	459,781	486,838	517,770	526,390
Finance and Insurance	520,579	514,826	523,933	540,844	544,423
Real Estate and Rental and Leasing	260,584	265,335	271,617	278,001	285,957
Services	6,809,757	7,056,066	7,247,138	7,442,898	7,630,490
Nonclassifiable Establishments			102,851	, ,	
NOTICIASSITIADIE ESTADIISUMENTS	36,808	63,478	102,831	119,680	82,201

Federal, State and Local Government

Total for all Industries

2,317,813

15,992,052

2,388,336

16,481,383

2,434,565

2,346,343

17,064,414

2,276,164

15,543,166

<sup>(1)</sup> Source: California Employment Development Department

<sup>(2)</sup> The industry data provided are intended to provide similar alternative information regarding the concentration of employment in various sectors of the California Economy. Due to confidentiality issues, the names of the top individual employers are not available.

<sup>(3)</sup> Note: 2018 information is not available and therefore not presented.

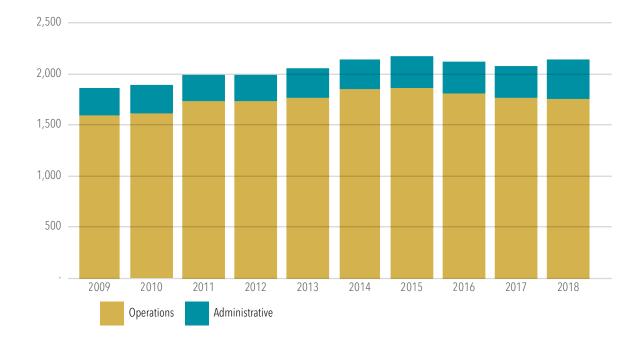
Definitions of Terms and Source Notes: www.labormarketinfo.edd.ca.gov

#### Schedule of Full-Time Equivalent Employees by Function (Unaudited)

Last Ten Fiscal Years

			Full-T	ime Equiva	alents by F	unction a	s of June :	30, <sup>1</sup>		
Function	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Field Operations	965	964	862	872	863	920	934	899	904	910
Engineering	208	206	328	329	337	330	324	280	283	286
Operations and Maintenance	312	321	318	295	338	348	355	388	381	390
Environmental Services	94	102	123	128	129	135	132	129	127	126
Flood Management	10	10	62	68	65	65	67	60	10	10
Safety of Dams	1	2	2	2	2	2	2	2	2	-
Power Management	-	-	38	38	35	47	52	53	53	35
Operations Total	1,590	1,605	1,733	1,732	1,769	1,847	1,866	1,811	1,760	1,757
Executive	112	120	43	51	56	63	71	77	78	90
Finance and Accounting	69	74	69	72	72	69	75	69	70	74
Technology Services	77	81	93	79	99	104	105	107	110	110
Communications	17	-	27	26	27	24	27	27	29	26
Legal	-	-	28	31	30	30	31	31	33	46
Human Resources	-	-	-	-	-	-	-	-	-	33
Administrative Total	275	275	260	259	284	290	309	311	320	379
Grand Total	1,865	1,880	1,993	1,991	2,053	2,137	2,175	2,122	2,080	2,136

1 - Excludes Retired Annuitants; FTEs calculated using the most recently available allocation factors



Source: California Department of Water Resources

# Operating and Capital Indicators (Unaudited)

Last Ten Years

	2008	2009	2010	2011	2012	2013	2014	2015	2016ª	2017ª
Water										
Water Deliveries (AF)	3,174,228	3,164,327	3,695,808	4,711,558	4,009,663	3,371,000	1,992,157	2,104,264	3,338,083	4,786,635
Percentage of Requested Water Delivered	35%	40%	20%	%08	%59	35%	2%	20%	%09	85%
Gross Area Served (Acres)	25,063,586	25,091,434	25,091,780	25,091,780	23,509,885	23,847,530	23,527,540	23,514,148	23,514,148	23,514,604
Estimated Population Served <sup>3</sup>	26,314,962	26,216,435	21,462,843	26,324,019	26,201,400	26,267,499	26,520,624	26,876,859	26,926,556	27,214,361
Statewide Precipitation (%of Avg) <sup>1</sup>	78%	81%	108%	135%	77%	%62	26%	74%	104%	157%
Statewide Snowpack (% of Apr 1 Avg)	100+%	88%	n/a	165%	54%	47%	33%	2%	%98	163%
Statewide River Runoff (% of Avg) <sup>1</sup>	%09	92%	91%	146%	62%	%09	35%	45%	%26	217%
Total Storage (% of Maximum) <sup>2</sup>	38%	39%	52%	85%	29%	41%	43%	30%	82%	120%
Total Miles of Aqueducts	705	705	705	705	705	705	705	705	705	705
Number of Storage Facilities	20	20	20	20	20	20	20	20	20	21
Gross Storage Capacity (AF)	6,761,600	6,761,600	6,761,600	6,761,600	6,761,600	6,761,600	6,761,600	6,761,600	6,761,700	6,761,700
Number of Pumping Plants	23	23	23	23	23	23	23	23	23	23
Number of Pumps	162	162	162	162	162	162	162	162	162	162
Power										
Energy Generated (Mwh)	3,541,000	3,650,000	3,920,000	4,846,000	4,198,000	3,068,539	1,132,659	1,274,706	3,075,218	4,519.141
Energy Purchased (Mwh)	4,603,000	3,970,000	5,081,000	4,895,000	3,741,000	3,604,135	1,691,424	2,780,643	4,108,601	5,378,979
Energy Sold (Mwh)	2,399,000	1,530,000	1,814,000	1,192,000	533,000	936,975	33,000	566,891	579,934	243,590
Net Power Consumption (Mwh)	5,745,000	000'060'9	7,187,000	8,549,000	7,406,000	5,735,699	2,791,083	3,488,458	6,603,883	9,654,529
Number of Power Plants	10	10	10	10	10	10	6	6	6	6
Number of Power Generating Units	37	37	37	37	37	37	36	36	36	36

Note: Unless otherwise noted, amounts are reported on a calendar year basis

AF - Acre Feet Mwh - Megawatt Hours

Source: State Water Project Analysis Office Annual Bulletin 132

1 - Measured in Water Years, which run from October of the prior year to September of the reported year

2 - Measured at the end of the Water Year

3 - Contains duplicate values. Some areas that are in two or more Contractor areas are included in each Contractor's total.

a - Amounts for these years are preliminary and subject to change

# Key Performance Indicators (Unaudited)

2017
4,786,635
85%
157%
163%
4,519,141
9,654,529
9
27,214,361
23,514,148
6,761,700
120%
120% 21
21

Note: Refer to Operating and Capital Indicators for details.

Last Ten Fiscal Years (in thousands)

	2009	2010	2011	2012	2013
Nondepreciable Utility Plant					
Land	\$ 138,156	\$ 136,129	\$ 136,129	\$ 136,129	\$ 136,797
Construction work in progress	461,208	400,229	366,975	408,072	528,836
Land use rights	10,925	10,925	11,005	11,250	11,549
Other intangible assets	80,659	81,976	81,976	88,930	100,064
Total Nondepreciable Utility Plant	690,948	629,259	596,085	644,381	777,246
Depreciable Utility Plant					
Aqueducts	1,949,071	2,029,898	2,057,437	2,064,208	2,071,255
Dams & reservoirs	765,246	765,246	781,110	781,202	781,408
Power plants	845,977	909,904	910,100	906,554	911,703
Pumping plants	784,247	784,247	787,008	829,344	836,655
Environmental preservation and mitigation	67,797	67,797	67,797	67,797	67,797
Fish protection	33,934	33,934	33,934	33,934	33,934
Facilities	-	-	64,810	65,820	66,230
Equipment	62,487	65,580	67,996	70,593	71,819
Computer software	23,629	23,629	23,629	24,162	24,501
Land use rights	-	-	-	272	272
Other intangible assets	-	-	-	-	11,995
General			5,964	6,491	39,579
Total Depreciable Utility Plant	4,532,388	4,680,235	4,799,785	4,850,377	4,917,148
Less Accumulated Depreciation/ Amortization	(2,015,610)	(2,094,306)	(2,194,406)	(2,281,806)	(2,366,429)
Total Utility Plant, Net	\$ 3,207,726	\$ 3,215,188	\$ 3,201,464	\$ 3,212,952	\$ 3,327,965

Capital Assets, Net (Unaudited)

Last Ten Fiscal Years (in thousands)

	2014	2015	2016	2017	2018
Nondepreciable Utility Plant					
Land	\$ 137,033	\$ 141,874	\$ 147,681	\$ 156,934	\$ 162,457
Construction work in progress	438,244	611,900	769,871	1,095,997	1,396,750
Land use rights	11,583	11,630	11,760	11,767	12,458
Other intangible assets	103,740	103,445	100,123	99,240	98,981
Total Nondepreciable Utility Plant	690,600	868,849	1,029,435	1,363,938	1,670,646
Depreciable Utility Plant					
Aqueducts	2,167,237	2,169,352	2,171,981	2,126,713	2,183,839
Dams & reservoirs	781,408	708,303	708,303	729,521	817,041
Power plants	466,358	441,202	470,818	477,044	523,529
Pumping plants	836,814	826,704	838,880	850,475	1,018,627
Environmental preservation and mitigation	67,797	67,797	67,797	67,797	67,797
Fish protection	33,934	33,934	35,544	35,544	35,544
Facilities	246,397	254,741	271,965	298,295	301,157
Equipment	75,705	77,384	79,229	82,526	75,214
Computer software	24,529	24,531	24,717	27,108	27,206
Land use rights	272	272	272	272	272
Other intangible assets	11,995	12,005	12,005	12,005	12,005
General	61,310	62,262	73,053	119,562	162,619
Total Depreciable Utility Plant	4,773,756	4,678,487	4,754,564	4,826,862	5,224,850
Less Accumulated Depreciation/ Amortization	(1,994,695)	(2,014,654)	(2,084,676)	(2,117,138)	(2,185,494)
Total Utility Plant, Net	\$ 3,469,661	\$ 3,532,682	\$ 3,699,323	\$ 4,073,662	\$ 4,710,002





