# **OFFERING MEMORANDUM**

Commercial Paper Ratings: Moody's: P-1 S&P: A-1+ See "COMMERCIAL PAPER RATINGS" herein

# \$600,000,000 State of California Department of Water Resources Water Revenue Commercial Paper Notes Series 1

This offering memorandum ("Offering Memorandum") contains certain information regarding the State of California Department of Water Resources (the "Department") Water Revenue Commercial Paper Notes, Series 1 (the "Series 1 Notes"), which may be issued from time to time pursuant to the Resolution (defined below). The Series 1 Notes are issued as interest-bearing obligations, in book-entry form, registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), in denominations of \$100,000 and integral multiples of \$1,000 in excess thereof. Purchasers of the Series 1 Notes will not receive physical certificates representing their beneficial interests in the Series 1 Notes.

The Series 1 Notes are limited, special obligations of the Department. The Series 1 Notes do not constitute a debt, liability, or obligation of the State of California. Neither the faith and credit nor the taxing power of the State of California is pledged to the payment of the principal of, or interest on, the Series 1 Notes.

The Series 1 Notes are not subject to redemption prior to maturity. The Department has appointed Goldman Sachs & Co. LLC, J.P. Morgan Securities LLC, and RBC Capital Markets, LLC as non-exclusive dealers for the Series 1 Notes.

Pursuant to a Revolving Credit Agreement, dated as of May 1, 2017, as amended by the First Amendment to Revolving Credit Agreement, dated October 18, 2018 (as further amended from time to time in accordance with its terms, the "Credit Agreement"), between the Department and Bank of America, N.A., (the "Bank"), the Bank has agreed to make loans to the Department, if necessary and subject to certain conditions precedent, to provide sufficient moneys for the full payment of the principal of and interest on the Series 1 Notes at the stated maturity of each Series 1 Note. *The Credit Agreement is a liquidity facility and under certain circumstances, the obligation of the Bank to make loans pursuant to the Credit Agreement will immediately terminate or be suspended and the Bank may suspend the ability of the Department to issue Series 1 Notes, and, in each case, such termination and/or suspension may occur without notice or payment to owners of the Series 1 Notes.* See "THE SERIES 1 NOTES – Security for the Series 1 Notes" and "THE CREDIT AGREEMENT – Events of Default" and "– Remedies" herein.

In the opinion of Orrick Herrington & Sutcliffe LLP, Note Counsel to the Department, delivered on May 1, 2020, based on an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Series 1 Notes, when the Series 1 Notes are issued in accordance with the Resolution and the Tax Certificate, will be excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and is exempt from State of California personal income taxes. Note Counsel also opined that interest on the Series 1 Notes is not a specific preference item for purposes of the federal alternative minimum tax. A complete copy of the opinion of Note Counsel is set forth in APPENDIX B – "OPINION OF NOTE COUNSEL." Note Counsel expressed no opinion regarding any other tax consequences related to the ownership or disposition of or the amount, accrual or receipt of interest on, the Series 1 Notes. Note Counsel has not taken and does not intend to take any action to update such opinion or to determine if interest on the Series 1 Notes is presently excluded from gross income for federal income tax purposes. See "TAX MATTERS" herein.

February 11, 2021

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# STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES OFFERING MEMORANDUM

# Relating to its \$600,000,000 Water Revenue Commercial Paper Notes Series 1

#### **INTRODUCTION**

The description and summaries of various documents in this Offering Memorandum do not purport to be comprehensive or definitive, and are qualified in their entirety by reference to each document for the complete details of all terms and provisions thereof. This Offering Memorandum also contains certain information with respect to the State Water Project and the contracts for a supply of water from the State Water Project (the "Water Supply Contracts") between the Department on behalf of the State of California (the "State") and 29 California public agencies (the "Contractors").

#### INFORMATION CONCERNING THE OFFERING

Goldman Sachs & Co. LLC, J.P. Morgan Securities LLC and RBC Capital Markets, LLC (collectively, the "Dealers") have been appointed to serve as non-exclusive dealers for the State of California Department of Water Resources (the "Department") Water Revenue Commercial Paper Notes Series 1 (the "Series 1 Notes"). This Offering Memorandum has been prepared by the Department. Each Dealer has reviewed the information in this Offering Memorandum in accordance with, and as part of, its responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Dealers do not guarantee the accuracy or completeness of such information. The information and expressions of opinion in this Offering Memorandum are subject to change without notice after the date on the cover page of this Offering Memorandum, and future use of this Offering Memorandum shall not otherwise create any implication that there has been no change in the matters referred to in this Offering Memorandum since the date on the cover page of this Offering Memorandum.

This Offering Memorandum is not to be construed as a contract between the Department or any Dealer and the purchasers of the Series 1 Notes.

# THE SERIES 1 NOTES

# General

The Series 1 Notes are being issued pursuant to the provisions of the Central Valley Project Act, Part 3 (commencing with Section 11100) of Division 6 of the California Water Code (the "CVP Act") and the Water Revenue Commercial Paper Notes, Series 1 Resolution (No. DWR-CP-1), adopted as of March 1, 1993, as amended by the First Supplemental Resolution (No. DWR-CP-2), adopted as of May 1, 1996, the Second Supplemental Resolution (No. DWR-CP-3), adopted as of December 1, 1998, the Third Supplemental Resolution (No. DWR-CP-4), adopted as of July 1, 2004, the Fourth Supplemental Resolution (No. DWR-CP-5), adopted as of May 1, 2017, and the Fifth Supplemental Resolution (No. DWR-CP-6), adopted as of October 1, 2018 (collectively, and as the same may be amended from time to time, the "Resolution"). All capitalized terms used in this Offering Memorandum and not defined herein have the same meanings as in the Resolution.

This Offering Memorandum relates to the offering, from time to time, of up to \$600,000,000 aggregate principal amount of the Series 1 Notes as authorized under the Resolution. The aggregate principal amount of the Series 1 Notes outstanding may be increased or decreased from time to time as provided in the Resolution. Over the last ten years the Department has issued and repaid more than \$23,318,586,000 aggregate principal amount of

commercial paper notes, which amount includes commercial paper notes issued to repay maturing commercial paper notes.

The Series 1 Notes will be issued in book-entry form, registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), in denominations of \$100,000 and integral multiples of \$1,000 in excess thereof. DTC acts as securities depository for the Series 1 Notes and beneficial interests in the Series 1 Notes may be purchased in book entry form only. Purchasers of the Series 1 Notes will not receive physical certificates representing their beneficial interests in the Series 1 Notes. Principal of and interest payments on the Series 1 Notes are to be made to Cede & Co., as nominee of DTC, by wire transfer of same day funds by U.S. Bank National Association in its capacity as issuing and paying agent (the "Issuing and Paying Agent") under the Issuing and Paying Agent Agreement, dated as of May 1, 2017 (the "Issuing and Paying Agent Agreement"), between the Department and the Issuing and Paying Agent. DTC's current practice is to credit Direct Participant's accounts on a payment date in accordance with their respective holdings shown on DTC's records. See "DTC and Book-Entry" below.

Each Series 1 Note will mature in not more than 270 days from its date of issue, provided, however, so long as the Credit Agreement (hereinafter defined) is in effect, no Series 1 Note may be issued with a maturity date later than five days prior to October 15, 2021 (as such date may be extended pursuant to the Credit Agreement). The Series 1 Notes will be available for authentication and issuance, and will be payable at the offices of the Issuing and Paying Agent, New York, New York, or at the offices of its successor, as Issuing and Paying Agent. Series 1 Notes presented for payment to the Issuing and Paying Agent no later than 11:00 a.m. (New York City time) on a Business Day will be paid in immediately available funds on such Business Day. Series 1 Notes presented for payment to the Issuing and Paying Agent after 11:00 a.m. (New York City time) on a Business Day will be paid in immediately available funds on such Business Day. Series 1 Notes presented for payment to the Issuing and Paying Agent after 11:00 a.m. (New York City time) on a Business Day will be paid in immediately available funds on such Business Day. Series 1 Notes presented for payment to the Issuing and Paying Agent after 11:00 a.m. (New York City time) on a Business Day will be paid in immediately available funds on the next succeeding Business Day, without accrual of additional interest.

Each Series 1 Note will be dated the date of its authentication and will bear interest from its date of authentication; payable on its maturity date, at an annual rate computed on the basis of actual days elapsed on a 365-day or 366-day year, whichever is applicable.

The Series 1 Notes will be issued, sold and delivered in denominations of \$100,000 and integral multiples of \$1,000 in excess thereof. The purchase price for the Series 1 Notes is to be paid, and amounts payable by the Department with respect to the Series 1 Notes will be paid, in immediately available funds.

The Series 1 Notes are not subject to redemption prior to maturity.

#### Series 2 Notes, Series 3 Notes and Series 4 Notes

In addition to the Series 1 Notes, the Department has authorized the issuance of its (i) Water Revenue Tax-Exempt Commercial Paper Notes, Series 2 (the "Series 2 Notes"); (ii) Water Revenue Taxable Commercial Paper Notes, Series 3 (the "Series 3 Notes"); and (iii) Water Revenue Tax-Exempt Commercial Paper Notes, Series 4 (the "Series 4 Notes"), in an aggregate principal amount of up to \$800,000,000 outstanding at any time.

The Series 2 Notes, the Series 3 Notes and the Series 4 Notes are each being issued pursuant to the provisions of the CVP Act. In addition to the CVP Act, the Series 2 Notes are being issued pursuant to the Water Revenue Commercial Paper Notes, Series 2 Resolution (No. DWR-CP SERIES 2-1), adopted as of May 1, 2017, as supplemented and amended by a First Supplemental Resolution (No. DWR-CP SERIES 2–2), adopted as of February 1, 2018, and as further amended by a Second Supplemental Resolution (No. DWR-CP SERIES 2–3), adopted as of February 1, 2021. In addition to the CVP Act, the Series 3 Notes are being issued pursuant to the Water Revenue Taxable Commercial Paper Notes, Series 3 Resolution (No. DWR-CP SERIES 3-1), adopted as of February 1, 2021. In addition to the CVP Act, the Series 4 Notes are being issued pursuant to the Water Revenue Commercial Paper Notes, Series 4 Resolution (No. DWR-CP SERIES 3-1), adopted as of February 1, 2021. In addition to the CVP Act, the Series 4 Notes are being issued pursuant to the Water Revenue Commercial Paper Notes, Series 4 Notes constitute Parity Debt. See "THE SERIES 1 NOTES – Security for the Series 1 Notes – *Sources of Revenues*."

#### **Purpose of the Series 1 Notes**

Proceeds of the Series 1 Notes are expected to be used to (1) provide funds for the construction costs of certain Water System Projects, including a portion of the costs of the Oroville Dam Spillways Response, Recovery and Restoration Project, which costs are expected to primarily be paid from proceeds of the Series 2 Notes (see "WATER SYSTEM PROJECTS" herein), (2) reimburse the Department for funds expended for the construction costs of certain Water System Projects, (3) fund interest on Series 1 Notes, and (4) pay costs of issuance of the Series 1 Notes. See "CALIFORNIA STATE WATER PROJECT – Oroville Dam Spillways Response, Recovery and Restoration Project and Related Claims."

#### **Expected Sources of Payment**

The Series 1 Notes, the Series 2 Notes and the Series 3 Notes are expected to be paid from proceeds of the Department's Central Valley Project Water System Revenue Bonds (the "Water System Revenue Bonds"), except to the extent other proceeds, such as federal reimbursements, are received for the costs of the Oroville Dam Spillways Response, Recovery and Restoration Project. A substantial portion of the costs associated with the Oroville Dam Spillways Response, Recovery and Restoration Project, up to 75%, is expected to be reimbursed by the federal government. The Series 4 Notes are expected to be paid from proceeds of Water System Revenue Bonds. Proceeds of the Series 1 Notes are expected to pay principal of the Series 1 Notes as they mature until the Series 1 Notes are otherwise paid as described in this paragraph. See "THE SERIES 1 NOTES – Security for the Series 1 Notes."

# **DTC and Book-Entry**

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the Department and the Treasurer of the State of California (the "Treasurer") believe to be reliable, but the Department and the Treasurer take no responsibility for the accuracy thereof.

DTC will act as securities depository for the Series 1 Notes. The Series 1 Notes will be issued as fullyregistered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Series 1 Note certificate has been issued for the aggregate principal amount of the Series 1 Notes and has been deposited with DTC.

DTC is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of Series 1 Notes under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 1 Notes on DTC's records. The ownership interest of each actual purchaser of each Series 1 Note ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 1 Notes are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Series 1 Notes, except in the event that use of the bookentry system for the Series 1 Notes is discontinued.

To facilitate subsequent transfers, all Series 1 Notes deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Series 1 Notes with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 1 Notes; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 1 Notes are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Series 1 Notes may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Series 1 Notes, such as defaults, and proposed amendments to the Series 1 Note documents. For example, Beneficial Owners of Series 1 Notes may wish to ascertain that the nominee holding the Series 1 Notes for their benefit has agreed to obtain and transmit notices to Beneficial Owners.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Series 1 Notes unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Department as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Series 1 Notes are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the Series 1 Notes will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Department or the Issuing and Paying Agent, as applicable, on payable dates in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Department or the Issuing and Paying Agent, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Department or the Issuing and Paying Agent, as applicable, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the Series 1 Notes at any time by giving reasonable notice to the Department or the Issuing and Paying Agent. Under such circumstances, in the event that a successor depository is not obtained, Series 1 Note certificates are required to be printed and delivered.

The Department may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, Series 1 Note certificates will be printed and delivered to DTC.

The foregoing description of the procedures and record keeping with respect to beneficial ownership interests in the Series 1 Notes, payment of principal of and interest with respect to the Series 1 Notes to Direct Participants, Indirect Participants or Beneficial Owners, confirmation and transfer of beneficial ownership interest in such Series 1 Notes and other related transactions by and between DTC, the Direct Participants, the Indirect Participants and the Beneficial Owners is based solely on information provided by DTC. Accordingly, no representations can be made concerning these matters and neither the Direct Participants, the Indirect Participants nor the Beneficial Owners should rely on the foregoing information with respect to such matters but should instead confirm the same with DTC or the Participants, as the case may be.

THE ISSUING AND PAYING AGENT, AS LONG AS A BOOK-ENTRY ONLY SYSTEM IS USED FOR THE SERIES 1 NOTES, WILL SEND ANY NOTICE TO OWNERS ONLY TO DTC. ANY FAILURE OF DTC TO ADVISE ANY PARTICIPANT, OR OF ANY PARTICIPANT TO NOTIFY ANY BENEFICIAL OWNER, OF ANY NOTICE AND ITS CONTENT OR EFFECT WILL NOT AFFECT THE VALIDITY OR SUFFICIENCY OF THE ACTION PREMISED ON SUCH NOTICE.

The Department and the Treasurer cannot and do not give any assurances that DTC will distribute to Participants, or that Participants or others will distribute to the Beneficial Owners, payments of principal of and interest and premium, if any, on the Series 1 Notes paid or other notices or that they will do so on a timely basis or will serve and act in the manner described in this Offering Memorandum. Neither the Department nor the Treasurer is responsible or liable for the failure of DTC or any Direct Participant or Indirect Participant to make any payments or give any notice to a Beneficial Owner with respect to the Series 1 Notes or any error or delay relating thereto.

SO LONG AS CEDE & CO. IS THE REGISTERED OWNER OF THE SERIES 1 NOTES, AS NOMINEE OF DTC, REFERENCES HEREIN TO THE HOLDERS SHALL MEAN CEDE & CO., AS AFORESAID, AND SHALL NOT MEAN THE BENEFICIAL OWNERS OF THE SERIES 1 NOTES.

# Security for the Series 1 Notes

*Sources of Revenues.* The Department expects to repay principal of and interest on its Series 1 Notes with the proceeds of additional Series 1 Notes until the Department issues Water System Revenue Bonds to provide permanent financing for Water System Projects financed with the Series 1 Notes, except to the extent other proceeds, such as federal reimbursements, are received for the costs of the Oroville Dam Spillways Response, Recovery and Restoration Project financed with the Series 1 Notes.

In the event the Department does not issue additional Series 1 Notes or Water System Revenue Bonds to repay maturing Series 1 Notes, the Series 1 Notes may, subject to certain terms and conditions, be repaid with funds loaned to the Department by Bank of America, N.A. (the "Bank"), pursuant to a revolving line of credit (the "line of credit") extended under the terms of the Credit Agreement. Under the Resolution, the Department may substitute the line of credit (or any other liquidity facility then in effect) with an alternate liquidity facility, provided that any Series 1 Notes that were outstanding on the day immediately preceding the effective date of such substitution either mature on such substitution date or, if they will remain outstanding after such substitution date, the Holders of such Series 1 Notes were notified of the possibility of such substitution prior to the issuance of such Series 1 Notes. The Treasurer will give the registered owners of the Series 1 Notes notice of any such substitution not later than 30 days after the occurrence thereof.

Under the Water Supply Contracts, the Contractors are required to pay to the Department amounts calculated to return to the Department its costs of the State Water Project allocated to water and power supply. See "THE WATER SUPPLY CONTRACTS" herein. The revenues pledged to the Series 1 Notes (the "Revenues") are

that portion of payments under the Water Supply Contracts attributable to the Water System Projects, to the extent financed by the Series 1 Notes. Said pledge ranks on a parity with the pledge of Revenues under the Credit Agreement to secure the obligations of the Department to the Bank thereunder, including, without limitation, the obligation of the Department to pay any loans made by the Bank to pay Series 1 Notes, together with all accrued interest thereon.

Notwithstanding anything in the Resolution to the contrary, in the event that moneys received by the Department under the Water Supply Contracts are insufficient to pay all amounts due under all Senior Lien Obligations, the Series 1 Notes and all Parity Debt, such moneys shall be allocated first to the payment of amounts due under all such Senior Lien Obligations, then to the payment of amounts payable on the Series 1 Notes and any Parity Debt, on a pro rata basis. The Owners of the Series 1 Notes shall have an equal priority right with the holders of Parity Debt to moneys received by the Department under the Water Supply Contracts.

The term "Senior Lien Obligations" is defined in the Resolution to mean the Water System Revenue Bonds and other obligations having an equal or senior priority right with the Water System Revenue Bonds to moneys received by the Department under the Water Supply Contracts, including, without limitation, the Department's payment obligations with respect to its Central Valley Project Power Facilities Revenue Bonds (currently consisting of the Department's Devil Canyon-Castaic Bonds) and the Department's obligation to deposit money in the California Water Resources Development Bond Fund.

The term "Parity Debt" is defined in the Resolution to mean amounts owing under the Credit Agreement and any indebtedness, installment sale obligation, lease obligation or other obligation of the Department for borrowed money or interest rate swap agreement having an equal priority right to moneys received by the Department under the Water Supply Contracts and therefore payable on a parity with the Series 1 Notes (whether or not any Series 1 Notes are Outstanding). The Resolution provides that the Owners of the Series 1 Notes shall have an equal priority right with the holders of Parity Debt to moneys received by the Department under the Water Supply Contracts.

Allocation of State Water Project Revenues. Under the California Water Code, State Water Project revenues are allocated between two funds, depending on the source of the revenues.

State Water Project revenues from Water System Projects financed by Water System Revenue Bonds are, to the extent allocated to the Water System Revenue Bonds, deposited in the Central Valley Project Revenue Fund and pledged to the repayment of Water System Revenue Bonds. State Water Project revenues from the Devil Canyon Castaic Facility are deposited in the Central Valley Project Revenue Fund and pledged to the payment of the Devil Canyon Castaic Bonds. State Water Project revenues from the Water System Projects financed by Series 1 Notes, Series 2 Notes, Series 3 Notes or Series 4 Notes are, to the extent allocated to the Series 1 Notes, the Series 2 Notes, the Series 3 Notes or the Series 4 Notes, respectively, deposited in the Central Valley Project Revenue Fund and pledged to the payment of the Series 1 Notes, the Series 2 Notes, the Series 3 Notes or the Series 1 Notes, the Series 2 Notes, the Series 3 Notes or the Series 4 Notes, the Series 2 Notes, the Series 3 Notes or the Series 4 Notes, the Series 2 Notes, the Series 3 Notes or the Series 4 Notes, the Series 2 Notes, the Series 3 Notes or the Series 4 Notes, the Series 2 Notes, the Series 3 Notes or the Series 4 Notes, the Series 2 Notes, the Series 3 Notes or the Series 4 Notes, as applicable.

All other State Water Project revenues are deposited in the California Water Resources Development Bond Fund and used first to pay the reasonable operating and maintenance costs of the State Water Resources Development System (which includes the State Water Project); second, to reimburse the General Fund of the State for the payment of the general obligation bonds issued to finance a portion of the capital costs of the State Water Project; and thereafter to the payment of the costs of the acquisition and construction of the State Water Resources Development System.

*Outstanding Obligations.* The Department has issued fifty-five series of Water System Revenue Bonds in an aggregate principal amount of \$11,491,765,000, of which \$2,956,940,000 in aggregate principal amount were outstanding as of January 1, 2021, of which \$178,340,000 in aggregate principal amount are expected to be paid on

December 1, 2021. The Department has also issued \$1,526,155,000 in aggregate principal amount of revenue bonds to finance certain power facilities of the State Water Project, of which \$16,955,000 in aggregate principal amount were outstanding as of January 1, 2021 and which have a scheduled final maturity of July 1, 2022 (the Department's Devil Canyon-Castaic Bonds). Such revenue bonds are secured by revenues of the Department other than those that are pledged to secure the Series 1 Notes and were and are issued under and secured by resolutions separate and apart from the Resolution authorizing and securing the Series 1 Notes.

The Department may issue additional Water System Revenue Bonds on a parity basis with outstanding Water System Revenue Bonds to finance the costs allocated to any Water System Project, including the cost of planning, construction or acquisition, or to refund Water System Revenue Bonds if, among other things, the Department certifies that (a) after the issuance of such Water System Revenue Bonds, estimated Revenues in each year will not be less than the sum of (i) 1.25 times debt service to be paid from Revenues, plus (ii) estimated Water System Operating Expenses, (b) the Debt Service Reserve Account established pursuant to the Central Valley Project Water System Revenue Bonds, General Bond Resolution, No. DWR-WS-1 of the State of California Department of Water Resources, adopted as of July 1, 1986 (as supplemented from time to time, the "Water System Revenue Bonds Resolution") is projected to contain on the first interest payment date on which interest for such additional Water System Revenue Bonds is payable from Revenues, an amount equal to the Reserve Account Requirement, and (c) the Treasurer must have received evidence that the issuance of the additional Water System Revenue Bonds will not result in the lowering of any rating then assigned to any then outstanding Water System Revenue Bonds by any nationally recognized rating agency. All capitalized terms used in this paragraph have the same meanings as in the Water System Revenue Bond Resolution.

Pursuant to Section 11731 and 11751 of the CVP Act, the Department may issue revenue bonds bearing interest at a rate not exceeding 12 percent per annum and may sell revenue bonds at a price of not less than 94 percent of the principal amount thereof. If the Department determines that interest on revenue bonds will be subject to federal income taxation and to the extent permitted by applicable law, such bonds may bear interest at such rate or rates, and may be sold at such price or prices, as the Department may determine.

The Department may also undertake additional capital projects in the future, which could result in the issuance of obligations secured by revenues under the Water Supply Contracts, other than the Series 1 Notes issued under the Resolution and the Series 2 Notes, the Series 3 Notes, the Series 4 Notes and the Water System Revenue Bonds issued under the related resolutions. These obligations could be issued in substantial amounts. See "STATE WATER PROJECT WATER SUPPLY – Long-Term Planning Efforts for the Delta – *Water Supply Reliability, Delta Conservation and Infrastructure.*"

In addition to the revenue bond obligations described above, a large portion of the State Water Project has been financed from the issuance of \$1,582,400,000 in aggregate principal amount of State general obligation bonds, of which \$10,600,000 in aggregate principal amount were outstanding as of January 1, 2021 and which have a scheduled final maturity of November 1, 2024.

*Pledge of Revenues.* The Series 1 Notes are limited, special obligations of the Department and are payable as to both principal and interest exclusively from the Revenues and other amounts pledged in the Resolution. The proceeds of all obligations issued by the Department to repay the Series 1 Notes, all Revenues, all amounts (including proceeds of the Series 1 Notes) held by the Treasurer pursuant to the terms of the Resolution (except for amounts held in the Rebate Fund) and all amounts held by the Issuing and Paying Agent under the Resolution and under the Issuing and Paying Agent Agreement are pledged to secure the payment of the principal of and interest on the Series 1 Notes in accordance with their terms, subject only to the provisions of the Resolution permitting the application thereof for the purposes and on the terms and conditions set forth therein. Said pledge shall constitute a lien on the Revenues and amounts in such funds and shall be valid and binding from and after delivery by the

Issuing and Paying Agent of the Series 1 Notes, without any physical delivery of such Revenues and amounts or further act.

THE SERIES 1 NOTES ARE LIMITED, SPECIAL OBLIGATIONS OF THE DEPARTMENT OF WATER RESOURCES. THE SERIES 1 NOTES DO NOT CONSTITUTE A DEBT, LIABILITY, OR OBLIGATION OF THE STATE OF CALIFORNIA. NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE STATE OF CALIFORNIA IS PLEDGED TO THE PAYMENT OF THE PRINCIPAL OF, OR INTEREST ON THE SERIES 1 NOTES.

#### **Amendment of the Resolution**

The Resolution and the rights and obligations of the Department, the Owners of the Series 1 Notes and the Treasurer may be modified or amended from time to time and at any time by a Supplemental Resolution, which the Department may adopt (subject to the provisions of the Credit Agreement related to amendments to the Resolution) when the written consent of the Owners of a majority in aggregate principal amount of the Series 1 Notes then Outstanding shall have been filed with the Treasurer; provided that (i) if such modification or amendment will, by its terms, not take effect so long as any Series 1 Notes of any particular maturity remain Outstanding and/or (ii) the Owners of any Series 1 Notes that will be outstanding on such effective date have been or will be notified of the possibility of the effectiveness of such modification or amendment prior to the issuance of their Series 1 Notes, the consent of the Owners of such Series 1 Notes shall not be required and such Series 1 Notes shall not be deemed to be Outstanding for the purpose of any calculation of Series 1 Notes Outstanding under the terms of the Resolution summarized in this section.

The Resolution and the rights and obligations of the Department and of the Owners of the Series 1 Notes and of the Treasurer may also be modified or amended at any time by a Supplemental Resolution adopted by the Department which shall become binding when the written consents of each provider of a letter of credit, credit facility, liquidity facility, a policy of bond insurance or similar agreement or instrument for the Series 1 Notes shall have been filed with the Treasurer, provided that at such time the payment of all the principal of and interest on all Outstanding Series 1 Notes shall be insured by a policy or policies of municipal bond insurance or payable under a letter of credit, credit facility or similar agreement or instrument the provider of which shall be a financial institution or association having unsecured debt obligations rated, or insuring or securing other debt obligations rated on the basis of such insurance or letters of credit, in one of the two highest Rating Categories of Moody's Investors Service ("Moody's") and S&P Global Ratings ("S&P").

No such modification or amendment as contemplated by the immediately preceding paragraphs in this section shall (a) extend the fixed maturity of any Series 1 Note, or reduce the amount of principal thereof, or extend the time of payment provided for any Series 1 Note, or reduce the rate of interest thereon, or extend the time of payment of interest thereon, without the consent of the Owner of each Series 1 Note so affected, or (b) reduce the aforesaid percentage of principal the consent of the Owners of which is required to effect any such modification or amendment, or permit the creation of any lien on the Revenues and other assets pledged under the Resolution prior to or on a parity with the lien created by the Resolution, or deprive the Owners of the Series 1 Notes of the lien created by the Resolution on such Revenues and other assets (in each case, except as expressly provided in the Resolution), without the consent of the Owners of all of the Series 1 Notes then Outstanding. It shall not be necessary for the consent of the Noteholders of the Series 1 Notes to approve the particular form of any Supplemental Resolution, but it shall be sufficient if such consent shall approve the substance thereof.

The Resolution and the rights and obligations of the Department, of the Treasurer and of the Owners of the Series 1 Notes may also be modified or amended from time to time and at any time by a Supplemental Resolution, which the Department may adopt without the consent of any Noteholders of the Series 1 Notes but only to the extent permitted by law and only for any one or more of the following purposes:

(1) to add to the covenants and agreements of the Department in the Resolution other covenants and agreements thereafter to be observed, to pledge or assign additional security for the Series 1 Notes (or any portion thereof), or to surrender any right or power herein reserved to or conferred upon the Department;

(2) to make provisions for the purpose of curing any ambiguity, inconsistency or omission, or of curing or correcting any defective provision, contained in the Resolution;

(3) to modify, amend or supplement the Resolution in such manner as to permit the qualification thereof under the Trust Indenture Act of 1939, as amended, or any similar federal statute hereafter in effect, and to add such other terms, conditions and provisions as may be permitted by said act or similar federal statute, and which shall not materially and adversely affect the interests of the Owners of the Series 1 Notes;

(4) to make modifications or adjustments necessary, appropriate or desirable to provide for the issuance of Parity Debt with such interest rate, payment, maturity and other terms as the Department may deem desirable, subject to the provisions of the Resolution;

(5) to provide for, or comply with a change in the terms for, the issuance of Series 1 Notes in bookentry form, provided that no such provision shall materially and adversely affect the interests of the Owners of the Series 1 Notes;

(6) to comply with requirements of the Internal Revenue Code of 1986 (the "Code") and the regulations applicable thereto or issued thereunder to satisfy the tax covenants of the Department in the Resolution;

(7) to make modifications or adjustments necessary, appropriate or desirable to accommodate credit enhancements and liquidity facilities, provided that no such provision shall materially and adversely affect the interests of the Owners of the Series 1 Notes; and

(8) for any other purpose that does not materially and adversely affect the interests of the Owners of the Series 1 Notes, including, without limitation, to provide for changes requested by Moody's or S&P in order to obtain or maintain a credit rating for the Series 1 Notes.

# THE DEPARTMENT

# Introduction

The Department is a department within the Natural Resources Agency of the State and is responsible for the planning, construction, operation and maintenance of the State Water Project. The Department is also responsible for, among other things, the operation of programs for the safety of dams, flood management, local assistance and subventions and other water-related matters. The Department 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. As of January 5, 2021, the Department employed approximately 3,141 full-time staff throughout the State.

# **Fund Accounting**

The Department's operations with respect to the State Water Project are accounted for and conducted under enterprise funds established by the California Water Code, principally the California Water Resources Development Bond Fund, the Central Valley Project Construction Fund and the Central Valley Project Revenue Fund. The Department's operations with respect to the State Water Project are separate and apart from the Department's operations that are primarily funded by State General Fund appropriations, from charges collected from customers of certain of the State's investor owned utilities related to the Department's Power Supply Revenue Bonds and from the funds pledged to secure bonds issued by the Department under The Wildfire Prevention and Recovery Act of 2019 to fund, in part, a Wildfire Fund created under such legislation to pay eligible claims related to a covered wildfire (the "Wildfire Fund Revenue Bonds"). At this time, no Wildfire Fund Revenue Bonds have been issued.

#### **Investment of Department Moneys**

The Department uses the State's Centralized Treasury System. Moneys on deposit in the State's Centralized Treasury System are invested by the Treasurer in the Pooled Money Investment Account (the "PMIA"). The State's treasury operations are managed in compliance with the California Government Code and according to a statement of investment policy that sets forth permitted investment vehicles, liquidity parameters and maximum maturity of investments. The PMIA operates with the oversight of the Pooled Money Investment Board (consisting of the Treasurer, the State Controller and the Director of Finance). The PMIA is not now invested, nor has it ever been invested, in structured investment vehicles or collateralized debt obligations. The PMIA Portfolio performance under the PMIA's holdings are displayed quarterly on the Treasurer's website and may be accessed under PMIA Quarterly Reports. The PMIA does not currently invest in auction rate securities. The Treasurer does not invest in leveraged products or inverse floating rate securities. The investment policy permits the use of reverse repurchase agreements subject to limits of no more than 10 percent of the total amount in the PMIA. All reverse repurchase agreements are cash matched either to the maturity of the reinvestment or an adequately positive cash management date which is approximate to the maturity of the reinvestment.

Department moneys held in the PMIA include Contractor payments to the Department along with certain grant and loan proceeds. Department moneys held in the PMIA are invested on a short-term basis until they are expended for their designated purpose, replacement reserves, construction funds and debt service reserves.

#### CALIFORNIA STATE WATER PROJECT

## Introduction

The State Water Project is one of the largest water supply projects undertaken in the history of water development and encompasses a complex system of dams, reservoirs, pumping facilities, power plants, aqueducts and pipelines owned and operated by the State. The Department is responsible for the planning, construction, operation and maintenance of the State Water Project. After a construction program that commenced in 1957, the project is now providing water to all 29 Contractors. The maximum, contracted amount of State Water Project water each Contractor may request for delivery each year is set forth in "Table A" of the related Water Supply Contract. Under the Water Supply Contracts presently in effect, the Contractors may request Table A water from the State Water Project in a maximum amount of 4,172,786 acre-feet. See "THE WATER SUPPLY CONTRACTS" herein. An acre-foot is the amount of water that will cover one acre of land to a depth of one foot, and is equivalent to 325,900 gallons. However, the amount of water that may be made available for delivery by the State Water Project in any year will depend on various factors, and the Water Supply Contracts provide for reductions in Table A water deliveries if the total amount available for delivery is insufficient to satisfy all Contractor requests. See "STATE WATER PROJECT WATER SUPPLY" herein.

More than two-thirds of California's natural water supply originates in the northern third of the State, but more than three-quarters of the demand for water is in the southern two-thirds, which includes the San Francisco Bay area, the San Joaquin Valley, the central California coast and Southern California. The State Water Project 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.

The State Water Project includes aqueducts, dams and reservoirs, pipelines, pumping facilities, hydroelectric generating facilities and other power plants. The State Water Project does not include any water treatment facilities or any desalination or other facilities for the production of water.

Portions of the State Water Project system consist of facilities developed and used jointly with the federal Central Valley Project operated by the U.S. Bureau of Reclamation (the "Bureau"). In addition, both projects have primary sources of water north of the delta formed by the confluence of the Sacramento and San Joaquin Rivers (the "Delta"), transport water across the Delta, and draw water from the southern edge of the Delta. The federal Central Valley Project, like the State Water Project, provides water for irrigation in the Central Valley, urban water supply, water quality, flood control, power, recreation, and fish and wildlife enhancement. Costs for the jointly developed facilities are shared, with approximately 55 percent being paid by the State and 45 percent being paid by the federal government. In 1986, the Department and the Bureau entered into a Coordinated Operation Agreement (the "COA") under which the State Water Project and the federal Central Valley Project coordinate operations, including releases from upstream reservoirs and pumping from the Delta. The COA permits increased operational efficiency for both projects, ensures that each project receives an equitable share of available surplus water, and provides for sharing responsibilities in meeting certain Delta water quality standards.

On December 12, 2018, the Department and the Bureau executed an amendment to the COA that, among other things, revised the sharing responsibilities related to Delta water quality standards. Under the amended COA, in certain water year types the Department's share of responsibility for meeting water quality standards for the Delta could be larger in dry years and smaller in wet years. On the same date, the Department and the Bureau also entered into an agreement regarding the potential effects of the California WaterFix (as described below) on the Central Valley Project. Under the agreement the Department would, in specific circumstances, avoid, mitigate or offset water supply impacts to the Central Valley Project arising from California WaterFix (the "No Harm Agreement"). In connection with the change in approach to a delta conveyance facility the No Harm Agreement has terminated in accordance with its terms. See "STATE WATER PROJECT WATER SUPPLY – Long-Term Planning Efforts for the Delta – *Water Supply Reliability, Delta Conservation and Infrastructure.*" On January 16, 2019, several environmental groups filed a lawsuit challenging the approval of the amendment and the agreement on public trust grounds and on the bases of alleged failures to comply with the California Environmental Quality Act ("CEQA") and the Delta Reform Act of 2009 (the "Delta Reform Act"). This lawsuit is currently pending and in the pretrial stage.

#### **Aqueduct System; Pumping Facilities**

All 647 miles of the initially planned aqueduct system have been completed. With the addition of the Grizzly Valley pipeline, the Thermalito Powerplant power canal and tail channel, and the extension of the East Branch aqueduct, the entire aqueduct system totals 705 miles. The main stem of the aqueduct system, the California Aqueduct, is 443 miles in length and transports water from the Delta starting at a point near Stockton southward through the Central Valley of California, over the Tehachapi Mountains and then into Southern California. Major branch aqueducts include the 28-mile North Bay Aqueduct north of the San Francisco Bay, the 45-mile South Bay Aqueduct in the southern San Francisco Bay area, the 116-mile Coastal Branch aqueduct from the southern San Joaquin Valley over the coastal mountains to the central California coast north of Los Angeles, the 32-mile West Branch aqueduct in Southern California and the 33-mile extension of the East Branch aqueduct in Southern California and the 33-mile extension of the East Branch aqueduct in Southern California and the 33-mile extension of the East Branch aqueduct in Southern California and the 33-mile extension of the East Branch aqueduct in Southern California and the 33-mile extension of the East Branch aqueduct in Southern California. The main stem of the California Aqueduct has 381 miles of canals and siphons, 49 miles of pipelines or tunnels and 13 miles of channels and reservoirs. The branch aqueducts are mostly pipelines and tunnels rather than canals.

State Water Project facilities also include 20 pumping plants and stations, four pumping-generating plants, and five hydroelectric power plants.

### **Storage Facilities**

State Water Project facilities include 36 storage facilities, of which 21 are primary reservoirs and lakes. Reservoirs are used to provide long-term water storage, manage water flows, provide recreation, and generate power. Proceeds from the Series 1 Notes, the Series 2 Notes, the Series 3 Notes and the Series 4 Notes are expected to be used to provide funds for costs related to certain Water System Projects. Proceeds from the Series 1 Notes, the Series 2 Notes and the Series 3 Notes are expected to be used to provide funds for, or refinance, costs related to the Oroville Dam Spillways Response, Recovery and Restoration Project. See "CALIFORNIA STATE WATER PROJECT – Oroville Dam Spillways Response, Recovery and Restoration Project and Related Claims" below.

The Division of Safety of Dams (within the Department) routinely inspects state jurisdictional operating dams and may impose operating restrictions on dams and reservoirs that could adversely affect the operation of the State Water Project. In 2018, the State Legislature enacted legislation that directs inspection frequency and activities, requires the Division of Safety of Dams to update inspection and dam re-evaluation protocols and expressly authorizes the Department to impose reservoir restrictions in cases where a dam fails to comply with provisions of the State's dam safety program. Dams that have a downstream hazard classification of "extremely high", "high" or "significant" must be inspected at least once every fiscal year, and "low hazard" dams must be inspected at least once every two fiscal years. Even though recent legislation expressly provides for reservoir restrictions, such restrictions have historically been used (through Division of Safety of Dams directive or voluntarily by the dam owner) to avoid or mitigate risk to life or property due to various deficiencies with dams.

In addition to the Department's internal dam safety efforts, independent reviews and inspections by external dam safety experts of State Water Project dams are conducted on a five-year frequency in accordance with Title 18, Chapter 1, Subchapter B, Part 12 of the Code of Federal Regulations. These independent reviews and inspections commonly result in recommendations for updated seismic, hydrology, and stability studies to evaluate a dam's safety and predicted performance. As the dam safety industry and regulatory requirements have advanced over time, these reviews have become increasingly detailed and led to a greater number of recommended studies. If a study finds that a dam or one of its components requires retrofitting or rehabilitation, the Department incorporates the project into its strategic planning process for future design and construction. For example, following the Oroville Dam spillways emergency, the Department completed spillway inspections and condition assessments at a number of the dams it operates other than the Oroville Dam, the spillways of which were undergoing reconstruction. See "CALIFORNIA STATE WATER PROJECT – Oroville Dam Spillways Response, Recovery and Restoration Project and Related Claims." These inspections and assessments identified the need for potentially significant capital outlays over the next ten years, which are expected to be initially financed with the Series 1 Notes and/or the Series 4 Notes and financed long-term with Water System Revenue Bonds.

#### **Inverse Condemnation and Certain Other Potential Liabilities**

Under the doctrine of inverse condemnation (a legal concept that entitles property owners to just compensation if their property is damaged by a public use), State courts have imposed liability on public agencies in legal actions brought by property holders for damages caused by such public agencies' infrastructure. Thus, if certain facilities of the Department, such as water storage or transportation facilities or its electric distribution and transmission lines, are determined to be the substantial cause of damage to property from flooding, fire or otherwise, and the doctrine of inverse condemnation applies, the Department could be liable for property damage, business interruption, interest, and attorneys' fees without having been found negligent, which liability, in the aggregate, could be substantial. In addition to such claims for property damage, business interruption, interest, and attorneys' fees, the Department could be liable for flood or fire suppression costs, evacuation costs, medical expenses, personal injury damages, punitive damages, and other damages under other theories of liability, including if the Department were found to have been negligent, which liability, in the aggregate, could be substantial. See "CALIFORNIA STATE WATER PROJECT – Aqueduct System; Pumping Facilities."

### **Oroville Dam Spillways Response, Recovery and Restoration Project and Related Claims**

A steady barrage of storms in early 2017 led to the wettest January and February in 110 years of Feather River hydrologic record. While releases from the Oroville Dam were being made to accommodate these extraordinary conditions, a section of the main spillway chute was damaged. When the emergency spillway was activated, erosion occurred on the slope downstream of the emergency spillway crest structure. 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.

On February 12, 2017, concern regarding the potential risk to the emergency spillway crest structure prompted the Butte County Sheriff to issue an evacuation order for approximately 188,000 people living in Oroville and other downstream communities. The Department successfully dropped the water level of the lake while crews worked 24 hours a day to repair erosion areas, place large rocks and concrete, remove eroded debris, construct or improve access roads, and begin the design for reconstruction efforts. The evacuation order was lifted on February 14, 2017.

Due to the magnitude of the project, repair of the main and emergency spillways was completed over multiple phases. To ensure public safety, the Department set and achieved a goal of November 1, 2017, to reconstruct the main spillway to handle flows of 100,000 cubic feet per second. In March 2018, the Department completed construction of a cut-off wall 750 feet downhill of the emergency spillway, which will prevent uphill erosion beyond the wall if the emergency spillway is ever used again. In spring of 2018, work on the main spillway ramped back up and the spillway was returned to operational status at its original design capacity in December 2018. At the emergency spillway, the Department constructed a splash pad that was completed in November 2018 and a buttress that was completed in March 2019. These two features are designed to bolster the integrity of the emergency spillway and the hillside downstream. In April 2019, the main spillway was successfully operated for the first time since its reconstruction. Major civil construction activities were completed in early 2020, and site rehabilitation and revegetation activities will continue through at least 2024.

Members of the U.S. Army Corps of Engineers, Federal Energy Regulatory Commission, the Division of Safety of Dams, as well as dam experts on a board of consultants were actively engaged with the Department throughout the project.

On April 1, 2017, the President issued a Federal Major Disaster Declaration for areas in California affected by the severe storms and flooding, which will continue to provide for a federal contribution to the costs of the Department's emergency response activities and to the repair and replacement work at Oroville Dam. It was envisioned that costs associated with the recovery and restoration efforts at the Oroville Dam spillways would be approximately \$1.1 billion, with up to 75% expected to be reimbursed by the Federal Government. In March 2019, the Federal Emergency Management Agency ("FEMA") informed the Department that it did not consider the following costs to be eligible for reimbursement through its public assistance program: (i) approximately \$214 million in recovery costs (with a \$161 million federal cost share) for the upper portion of the main spillway and (ii) approximately \$290 million in costs (with a \$218 million federal cost share) for the recovery of the emergency spillway. The Department appealed FEMA's determination and provided additional information to support the Department's assertion that these costs should be eligible for reimbursement. FEMA responded to the Department's appeal in February 2020, finding that the costs associated with the upper portion of the main spillway are eligible for reimbursement, whereas the costs associated with the emergency spillway remain ineligible for reimbursement. In May 2020, the California Office of Emergency Services filed with FEMA, on behalf of the Department, an application for hazard mitigation grant funding for these costs associated with the emergency spillway that are not being reimbursed through FEMA's public assistance program.

In September 2020, the Department updated its cost estimate for work associated with the recovery and restoration efforts at the Oroville Dam spillways to \$1.186 billion. Through ongoing discussions with FEMA, it has been determined that an additional \$68 million will not be eligible for a FEMA cost share. As of December 2020, the Department had received \$234 million in federal reimbursement. Based on the Department's discussions with FEMA, the Department expects FEMA to provide an additional \$377 million through its public assistance program. The amount of federal cost share for the work associated with the Oroville Dam's emergency spillway

provided through the federal hazard grant mitigation program is more uncertain and is currently estimated at approximately \$209 million. These amounts are based on preliminary estimates and may be materially revised as work progresses.

The following chart summarizes the current, approximate amounts and status of the costs and FEMA reimbursements for the Oroville Dam spillways restoration efforts described above. The chart also shows the approximate portion of costs of such repair and replacement that is currently expected to be financed long-term with Water System Revenue Bonds (assuming all FEMA reimbursements described above and in the following chart are received) and paid by the Contractors under the Water Supply Contracts.

Total costs expected	
through 2024	\$1.186 billion
Future costs expected (for years 2021-2024)	\$61 million
FEMA reimbursements to date	\$234 million
Expected future FEMA reimbursements (for years 2021-2024)	\$377 million
FEMA reimbursements still being sought or negotiated	\$209 million
Amount expected to be financed with Water System Revenue Bonds	\$366 million

The costs for the repair and replacement work at Oroville Dam financed with the proceeds of the Series 1 Notes, the Series 2 Notes and the Series 3 Notes and not reimbursed by FEMA are expected to be financed long-term with Water System Revenue Bonds. These Water System Revenue Bonds are expected to be paid by the Contractors under the Water Supply Contracts. The Department does not believe the costs arising from this project will materially impact the Department's operations or ability to pay debt service on its Water System Revenue Bonds.

A number of lawsuits seeking compensation from the Department for damages claimed to have been caused by the Oroville Dam emergency have been filed. Those lawsuits initially included two class actions filed on behalf of four classes consisting of persons who evacuated, persons who claimed business losses, persons who claimed property damage and persons who claimed reduction in property values. The Department prevailed in its challenge to the validity of those class actions, and only the class of evacuees appealed (*Bechtel et al. v DWR*, Butte County Superior Court Case No. 17CV02298). In addition to the class actions, the City of Oroville and the County of Butte have each filed separate lawsuits seeking damages to reimburse each for costs and losses they claim they suffered as a result of the incident and the response to it. The lawsuit filed by the County of Butte was settled in 2019 and has been dismissed. Other lawsuits have been filed by agricultural land owners and other land owners who claim their properties adjacent to the Feather River sustained flooding and other damages. These lawsuits allege, among other things, that the Department's design, maintenance and operation of the Oroville Dam facilities caused damages to their property and agricultural crops. In addition, Pacific Gas and Electric Company ("PG&E") filed a lawsuit seeking reimbursement for costs it incurred to relocate electrical transmission lines in the vicinity of Oroville Dam during the emergency.

The Butte County District Attorney also filed a lawsuit on behalf of the People of the State asserting a claim for civil penalties under a State Fish & Game Code statute. In that action, the Butte County District Attorney sought up to \$51 billion as civil penalties for the release of materials into the Feather River that were allegedly deleterious to fish, plant life, birds and animals. The Department filed a motion for summary judgement contesting the Butte County District Attorney's allegations. On January 5, 2021, the court entered a final order granting the Department's motion for summary judgement in the case filed by the Butte County District Attorney, dismissing the matter in its entirety, and the notice of entry of judgment was filed on January 28, 2021. The Butte County District Attorney filed a notice of appeal on February 9, 2021. As of the date of this Offering Memorandum, the briefing on this appeal has not yet commenced.

All active lawsuits relating to the damages claimed to have been caused by the Oroville Dam emergency have been transferred to the Sacramento County Superior Court, coordinated for purposes of pretrial activities, and are being vigorously defended by the Department. Regular discovery closed at the end of October 2020 and expert witness discovery is ongoing. The first trial, a bench trial on inverse condemnation claims filed by eight of the plaintiffs, is set to begin on April 5, 2021, and is scheduled for 40 court days. In addition, the Department has successfully obtained judgments and dismissals of several other cases. The Department believes that this litigation will not have a material adverse effect on its ability to continue to operate and maintain the State Water Project or on the security for, or the Department's ability to repay, the Series 1 Notes or its Water System Revenue Bonds.

# **Operational Control**

The Department schedules and controls the operation of the State Water Project from a central operations center. This central operations center uses the communication and Supervisory Control and Data Acquisition ("SCADA") systems to monitor and control the water and power movements in the aqueducts, pipelines and tunnels of the State Water Project, in addition to the 29 pumping and generating plants of the State Water Project. The SCADA systems upgrade associated with Centralized Control System Migration ("CCSM") Phase 4 – Pumping and Generating Plants (the "Phase 4 Upgrade") continues and is currently scheduled to be completed in 2023. The CCSM Phase 4 Upgrade for the Southern Field Division has completed five of the six plants, San Luis Field Division has completed one of two plants, and efforts have started on two Coastal plants in the San Joaquin Field Division. The Phase 4 Upgrade is the final phase of the currently planned upgrades to the communications systems and the SCADA systems. When the upgrades are complete, the central operations center will continue to monitor and remotely control all State Water Project facilities. Effective remote operations include start-up and shut down of pumping and generating units and opening or closing of gates and valves which control the flow of water throughout the State Water Project in a coordinated manner. Under emergency or back-up operation mode, the operations of each field division level.

# **Seismic Considerations**

State Water Project facilities were designed to withstand earthquakes without incurring major damage. Dams, for example, were designed in accordance with the Division of Safety of Dams criteria in effect at the time of their construction to accommodate movement under and within their foundations and to resist earthquake forces on their embankments. Earthquake loads were taken into consideration in the design of project facilities such as pumping plants and power plants. Should further scientific and/or engineering research indicate that as-built seismic loads may be exceeded in future earthquakes, these criteria will need to be re-evaluated, and affected State Water Project facilities may need to be strengthened accordingly.

Major portions of the California Aqueduct are located near the San Andreas Fault and other active faults. State Water Project conveyance facilities cross seismically active faults at multiple locations. Pipelines that cross active faults are generally located above ground or at very shallow depths to ease repair in case of damage from movement along a fault. The location of check structures on the canal allows for hydraulic isolation of pools to perform any needed fault-crossing repairs.

Since the Loma Prieta earthquake of October 1989, 20 earthquakes of magnitude 6.0 or greater have occurred either in, or within 100 miles of, California. Of those earthquakes, only the January 1994 Northridge earthquake occurred close enough to the State Water Project to cause damage to State Water Project facilities, however, the damage caused was minor. The Napa earthquake of August 2014 had a 6.0 magnitude and did not cause damage to State Water Project facilities. The Ridgecrest earthquake sequence in July 2019 consisted of a magnitude 6.4 followed by a magnitude 7.1 and did not cause damage to State Water Project Facilities due to their distance from the event. Large earthquakes will continue to occur in and near California for the foreseeable future. Their magnitude, location and time of occurrence cannot be predicted. Under the Water Supply Contracts, the

Contractors are required to continue making all payments to the Department when due despite any interruption in water supply due to an earthquake.

A major seismic event causing damage to State Water Project facilities could disrupt the operation of the State Water Project or require significant unexpected capital expenditures. Such an event could also have an impact on Central Valley and Delta levees. See "STATE WATER PROJECT WATER SUPPLY – Central Valley and Delta Levees."

# Self-Insurance; Financing of Emergency Repairs

The State does not maintain commercial insurance for the State Water Project, nor does it maintain a funded insurance reserve. However, the Department maintains a replacement reserve, currently in the approximate amount of \$38.2 million, as of January 1, 2021, which it uses to replace certain equipment periodically. The Department is authorized to cause the issuance of notes, payable from available revenues or federal reimbursements under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, for the purpose of providing funds for emergency repairs to power projects or the State Water Project necessitated by natural disasters, provided that certain conditions can be met.

# **Security Efforts; Emergency Preparedness**

Department operations staff and security personnel undertake security efforts to safeguard the infrastructure, key facilities, information technology systems, public, personnel and the water supply of the State Water Project. Security measures include restrictions on public access to recreational and other State Water Project facilities, monitoring of State Water Project facilities, and a State Water Project-wide security plan.

The Department coordinates its emergency management and security efforts with the California Governor's Office of Emergency Services, other State departments, and various local, State and federal law enforcement agencies as a matter of routine security procedure, and coordinates with other water, health, environmental and public safety agencies as needed. In addition, the Department is a participant on various California Emergency Management Agency committees.

Although the Department has undertaken many emergency preparedness and security improvements, a terrorist attack, or other attack on the State Water Project, or significant natural disaster could materially impair system operations and water deliveries.

The Department's cyber security program leverages an in-depth defense approach to maintain the confidentiality, integrity, and availability of the Department's systems and data. The Department has adopted and maintains an active Cyber Security Program ("CSP") that is based on National Institute of Standards and Technology cybersecurity guidance and employs industry standard Center for Internet Security critical security controls. The CSP policies and controls are reviewed regularly by the internal Information Security Team, and State and independent third-party auditors. The Department has appointed a Chief Information Security Officer who oversees the internal Information Security Team. The Information Security Team is responsible for providing security guidance and reviews on the implementation of new technologies based on the Department's CSP as well as overseeing the monitoring of potential threats and vulnerabilities, utilizing and executing security controls to validate policy enforcement, protecting against cyber-attacks, and investigating any potential unauthorized activity or threats to the Department's information technology environment. The information systems and security controls are continuously tested with internal vulnerability assessments that include daily updates. Department staff are required to participate in the Department's information security education and awareness training.

While the Department's cyber security program is periodically reviewed, no assurances can be given by the Department that such measures will ensure the Department won't be subject to material cybersecurity threats and

attacks. Cybersecurity breaches could damage the Department's systems and data and cause material disruption to the Department's operations. The costs of remedying any such damage or protecting against future attacks could be substantial. Further, cybersecurity breaches could expose the Department to material litigation and other legal risks, which could cause the Department to incur material costs related to such legal claims or proceedings. The Department does not purchase liability insurance covering cyber-losses and does not require its vendors to purchase technology errors and omissions insurance coverage.

# **Environmental Considerations**

Projects undertaken by the Department are generally subject to CEQA, and certain projects involving the participation of the Bureau or other federal agencies are also subject to the National Environmental Policy Act of 1969, as amended (42 U.S.C. Section 4321) ("NEPA").

Under CEQA, a project that may have a significant effect on the environment and is to be carried out or approved by a public agency must comply with a comprehensive environmental review process, including the preparation of an Environmental Impact Report ("EIR"). The EIR reflects not only an independent technical analysis of the project's potential impacts, but also the comments of other agencies with some form of jurisdiction over the project and the comments of interested members of the public. Contents of the EIR include a detailed statement of the project's significant environmental effects; any such effects that cannot be avoided if the project is implemented; mitigation measures proposed to minimize such effects; alternatives to the proposed project; the relationship between local and short-term uses and long-term productivity; any significant irreversible environmental changes that would result from the project; the project's growth-inducing impacts; and a brief statement setting forth the agency's reasons for determining that certain effects are not significant and hence do not require discussion in the EIR. Before approving a project, the agency must make findings on whether or how it can mitigate the significant environmental effects of the project. If the agency requires mitigation, the agency must adopt a mitigation monitoring plan to determine whether the mitigation is carried out during project implementation. If the agency determines that the project itself will not have a significant effect on the environment, it may adopt a written statement (called a negative declaration) to that effect and need not prepare an EIR. After deciding to approve or carry out a project, either following the EIR process or after adopting a negative declaration, the agency must file notice of such determination. Any action or proceeding challenging the agency's determination must be brought within 30 days following the filing of such notice. Actions have been, and in the future may be, filed against the Department challenging the Department's compliance with CEQA, including the adequacy of the EIR or other environmental documents, for a particular project. If the action is successful, the particular project could be delayed, revised, suspended or canceled. CEQA also contains a number of exemptions, which the Department uses for its projects when appropriate.

As part of its regular planning and budgetary process, the Department gives careful attention to environmental considerations. All projects are evaluated under the Department's environmental impact review procedures, developed in compliance with federal and State laws and regulations.

# **Potential Effects of COVID-19**

The outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, has been declared a pandemic by the World Health Organization. The pandemic is currently affecting many parts of the world, including California and the United States generally. Commerce, travel, asset values and financial markets have been negatively affected worldwide, and it is widely expected that global and local economies, including those within the State, will continue to be negatively affected, at least for some period of time. The Department is assessing and monitoring the effects that the ongoing COVID-19 outbreak and the measures taken by the State and local governments to slow the virus' spread will have on the Department's and the Contractors' finances and operations. Additionally, the Department is utilizing financial tools to mitigate COVID-19/recessionary pressures, including pre-funding of future capital expenditures to bolster its financial flexibility.

Reduced economic activity and its associated impacts, such as job losses, income losses, business closures and housing foreclosures or vacancies, and any recession that may occur, may affect aggregate levels of retail water use throughout the State and reduce water demands in the Contractors' service areas. Further, declines in assessed valuations in the Contractors' service areas or increases in property tax delinquencies or non-payment resulting from the economic disruption may negatively affect property tax collections, which is a permitted source of income for the Contractors. On April 2, 2020, Governor Newsom issued Executive Order N-42-20, which, among other things, orders the restoration of water service to residential customers in occupied residences whose service was discontinued for nonpayment during the state of emergency, and suspends the authority of retail water service providers to discontinue water service to residential and qualifying small business customers for nonpayment. The Department cannot predict what effects Executive Order N-42-20 or other governmental actions will have on the finances of the Contractors or their ability to make payments under the Water Supply Contracts. The Department is also unable to predict whether any Contractors will provide additional deferrals, forbearances, adjustments or other changes to their customers or their billing and collection procedures, any of which could affect the ability of the Contractors to make the payments required under the Water Supply Contracts.

Additionally, the COVID-19 outbreak may directly negatively affect the Department. A protracted disruption in the manufacturing or construction industry may affect supply chains or delay construction schedules for, or the implementation of, the Department's State Water Project facilities and may increase the costs of such projects or the Department's operations.

To date, the COVID-19 outbreak has not had a significant impact on the Department's State Water Project operations. The State Water Project has been deemed critical infrastructure by the State and its employees essential workers. Accordingly, the Department has identified both critical activities and staff to ensure the continued, reliable and safe operation of the State Water Project. For those staff who are continuing to work on-site, as opposed to remotely, the Department has created a robust health and safety plan and implemented increased cleaning efforts. The Department has also coordinated with its contractors on State Water Project construction regarding health and safety plans for the workers at these project sites. The Department is not presently aware of any significant delays in the construction of State Water Project facilities due to the COVID-19 outbreak. Additionally, to date, the Department's receipt of expected payments from the Contractors has not been affected by the COVID-19 outbreak. However, the ultimate geographic spread of the virus, the duration and severity of the outbreak, and the ramifications of future actions that may be taken or required by governmental authorities to contain and respond to the outbreak are uncertain, and no assurances can be given that the Department's operations and finances, or those of any Contractor, will not be negatively affected.

# STATE WATER PROJECT WATER SUPPLY

# General

This section describes the historical water supply available for delivery by the State Water Project and certain factors that have had or may in the future have an effect on the availability of such water supply. The Department can give no assurances that future legislation or regulation in any of the areas discussed in this section will not affect State Water Project operations including, but not limited to, reductions in the water supply available to the State Water Project. The respective obligations of the Contractors to make payments in amounts sufficient to pay debt service on the Series 1 Notes and the Water System Revenue Bonds are not conditioned on the amount of water delivered.

# **Annual Water Deliveries**

The annual water supply available for delivery by the State Water Project will vary from year to year depending on many factors including hydrologic conditions. The Department's annual determination of the State Water Project's delivery capability is based on extensive and ongoing analyses of operational capability taking into account (i) storage levels at the beginning of the year, (ii) target storage levels at the end of the year, (iii) the actual

amount of snow and rainfall that has occurred to date in the year and a conservative estimate of the amount of snow and rainfall that may occur over the remainder of the year, (iv) the operational capacity of State Water Project facilities, and (v) operational mandates for in-stream water requirements and environmental protection of the Delta as imposed by federal and state regulatory agencies. For each of the last ten years, each Contractor has requested 100 percent of their Annual Table A Amount for that year. See "THE WATER SUPPLY CONTRACTS – Basic Contract – *Annual Table A Amounts*." If delivery capability was less than 100 percent of such requests, using the analysis described above the Department allocated Table A water to the Contractors as a percentage of Contractor requests. The following table provides the percentage of allocated Table A water, the Table A water delivered, and the total water delivered to the Contractors for the most recent ten years for which data is available.

Calendar Year	Allocated Table A Water <sup>(1)</sup>	Table A Water Delivered to Contractors in Acre-Feet <sup>(2)</sup>	Total Water Delivered to Contractors in Acre-Feet <sup>(3)</sup>
2010	50%	2,011	2,831
2011	80	2,848	3,662
2012	65	2,594	2,886
2013	35	1,620	2,213
2014	5	474	1,239
2015	20	852	1,499
2016	60	2,016	2,351
2017	85	3,401	3,768
2018	35	1,570	2,047
2019	75	2,819	3,058

# Annual Water Deliveries of the State Water Project (Percentage of Contractor Requests) (Acre-Feet in Thousands)

The delivery of less than 100 percent of Contractor requests for Table A water in the ten years listed in the preceding table reflects the impact of one or more of the factors listed in the preceding paragraph affecting the Department's annual determination of the State Water Project's delivery capability in each such year.

<sup>(1)</sup> The allocation of annual Table A water for each calendar year is determined in the Spring of that year and based on hydrological conditions at the time of determination and other factors as described in the paragraph preceding this table. The Spring determination of annual water for a given calendar year is evaluated throughout the winter and may be revised in response to hydrologic conditions and regulatory mandates.

<sup>(2)</sup> Historical deliveries reflect changes resulting from the reclassification of water to or from these water types; flexible withdrawal, Non-State Water Project local water rights, or Non-State Water Project water. Contractors also may choose to receive allocated Table A water in a later year subject to operational constraints (carryover). Water available as determined by the Department, on behalf of the State, not needed for fulfilling contractors' maximum annual Table A deliveries under the applicable Water Supply Contract or for meeting operational needs of the State Water Project, including water storage goals ("Article 21 water") is delivered along with Table A allocations.

<sup>(3)</sup> All water delivered to Contractors, including but not limited to, Table A water for that year; Table A water allocated to a previous year (carryover); water surplus to operational needs, water quality, and Delta requirements; Article 21 water, transfer; purchased; and Non-State Water Project water.

According to the Technical Addendum to the Final State Water Project Delivery Capability Report 2019, dated August 26, 2020, the Department estimates that if annual precipitation conditions vary in the same manner as they have over the eighty-two year period of analysis (water years 1922-2003, a water year consists of twelve consecutive calendar months beginning with the month of October and is identified by the calendar year in which it ends), the State Water Project would be capable of delivering at least 1,721,000 acre-feet of water in approximately 75 percent of the water years, at least 2,577,000 acre-feet of water in approximately 50 percent of the water years, and at least 3,097,000 acre-feet of water in approximately 25 percent of the Water Project in a first spresently in effect, the Contractors may request Table A water from the State Water Project in a maximum amount of 4,172,786 acre-feet. The maximum, contracted amount of Table A water each Contractor may request for delivery each year was established when the Water Supply Contracts were executed and delivered, prior to the final determination of the scope of the State Water Project. Accordingly, the State Water Project's delivery capability in any given year may be significantly less than the Table A water amounts requested by the Contractors.

# Drought

California has experienced many droughts, recorded as far back as 1841, and has one of the most variable climates of any state in the United States, often experiencing very wet years followed by extremely dry ones. The 2020-21 winter season has been very dry and may remain so for some time. As the most populous state in the U.S. and a major agricultural producer, drought in California can have an economic as well as environmental impact. The annual water supply available for delivery by the State Water Project in any year will vary depending on various factors, including hydrologic conditions and regulatory mandates. See "STATE WATER PROJECT WATER SUPPLY – Statewide Water Considerations – *Climate Change*." The Department is considering possible plans for a drought response should the current dry conditions continue.

# State and Federal Regulations Affecting the State Water Project

The following subsections describe certain state and federal regulations affecting the State Water Project and related litigation that could impact the ability of the Department to deliver water to the Contractors. The respective obligations of the Contractors to make payments in amounts sufficient to pay debt service on the Series 1 Notes and the Water System Revenue Bonds are not conditioned on the amount of water delivered. See "THE SERIES 1 NOTES – Security for the Series 1 Notes – *Sources of Revenues*," "STATE WATER PROJECT WATER SUPPLY – General" and "THE WATER SUPPLY CONTRACTS."

*Bay-Delta Water Rights and Water Quality Regulation.* The State Water Project diverts unregulated flow, and rediverts water it has stored upstream and later released into the Feather River, from the Delta. The Delta is also the source of water for local agricultural, municipal and industrial needs, and, in addition, supports significant resident and anadromous fish and wildlife resources and important recreational uses of water.

The State Water Resources Control Board (the "SWRCB") is responsible for regulating the State Water Project (along with the federal Central Valley Project operated by the Bureau) under the SWRCB's water quality and water rights authorities to protect the reasonable needs of all beneficial uses of Delta waters. In this regard, in 1978, the SWRCB adopted a Water Quality Control Plan for the Bay-Delta estuary which has been amended periodically. In March 2000, the SWRCB implemented the Water Quality Control Plan, as amended through 1995, through a water rights decision known as "D 1641." D 1641 is still in effect and requires the State Water Project and the federal Central Valley Project to meet the Water Quality Control Plan's objectives for maintaining water quality. The Water Quality Control Plan for the Bay-Delta estuary as amended through 2006 is referred to herein as the "2006 Plan." The SWRCB is currently updating the 2006 Plan through two separate plan amendment processes. In 2009, as part of these processes, the SWRCB issued a notice of preparation ("NOP") and began scoping for environmental documentation to evaluate the effects of potential modifications to the southern Delta salinity and San Joaquin River flow objectives and adopted related amendments to these objectives in December

2018 (the "2018 Plan Amendments"). A future water rights proceeding will be required to modify D 1641 requirements consistent with the amendments. Various stakeholders have since filed suit against the SWRCB challenging these amendments, and these suits are in the pretrial stage. A framework document for the second plan amendment process concerning the Sacramento/Delta Flows and Cold Water, Delta Outflows, and Interior Delta Flows was released in July 2018. Also in July 2018, in response to potential conflicts with federal law, the Bureau submitted a comment letter on the Bay-Delta plan update for the Lower San Joaquin River and Southern Delta indicating that the Central Valley Project shall be operated in conformity with state standards and regulations unless doing so would be inconsistent with federal law. The Bureau and the Department currently share responsibility for achieving many of the standards in the 2006 Plan. The Department believes that should the SWRCB impose regulations that are preempted by federal law this would likely impact State Water Project yield but would not have a material adverse effect on its ability to continue to operate and maintain the State Water Project or on the security for, or the Department's ability to repay, the Series 1 Notes or the Water System Revenue Bonds.

As an alternative to the 2006 Plan update process, the Department, the California Department of Fish and Wildlife ("DFW") and many stakeholders, including water users, public water agencies and non-governmental organizations, have been engaged over the last several years in a process to negotiate Voluntary Agreements (each a "VA"). The VA process is intended to result in negotiated contributions of water, funding, and other measures that would be submitted to the SWRCB for consideration as an alternative to the 2006 Plan update process to implement the Water Quality Control Plan. The Contractors have supported contributions in the form of commitments to forego exports and collect fees on water diversions to fund environmental water acquisition, restoration, and research activities over the proposed 15-year VA term. The specific intended VA contributions and proposed terms of agreement have neither been finalized nor submitted to, or adopted by, the SWRCB and further discussion will be required.

In February 2006, the SWRCB ordered the Department and the Bureau to take corrective actions to address threatened violations of their respective water rights permits implementing the southern Delta summer water quality objective for agricultural uses. Under this action, the Department and the Bureau were to provide a schedule to the SWRCB of the proposed construction and operation of permanent operable gates in the southern Delta to help improve water quality. Other requirements of the enforcement action addressed the extent of the obligations of the State Water Project and federal Central Valley Project to protect water quality in the southern Delta. In response to a lawsuit filed against the SWRCB by the Bureau, certain Contractors and certain federal water contractors, the SWRCB clarified the enforcement order and the parties to the lawsuit entered into a stipulation for dismissal without prejudice and a tolling agreement, which extended to April 30, 2020. The tolling agreement was extended in spring 2020 until the litigation challenging the 2018 Plan Amendments is resolved. In addition, a June 2009 federal biological opinion for salmon, steelhead trout and green sturgeon states that the Department shall not implement the permanent operable gates because that project would adversely modify critical habitat. As a result, in January 2010, the SWRCB issued an order that modified its February 2006 enforcement order by, among other things, allowing the Department and the Bureau to defer the construction of the permanent operable gates and requiring the Department and the Bureau to develop a plan ("South Delta Salinity Management Plan") for studies and other measures to address water quality in the southern Delta until the SWRCB issues a new water quality control plan and related water rights decision for the Delta. Based upon results from these studies, the Department submitted an updated South Delta Salinity Management Plan to the SWRCB in June 2017, which the Department is still operating under. The 2018 Plan Amendments require the Department and the Bureau to develop a Comprehensive Operations Plan ("COP") to mitigate impacts of the State Water Project and the Central Valley Project on salinity in the southern Delta and to conduct associated studies. A draft COP was submitted to the SWRCB in August 2019 and circulated for public comment by the SWRCB in February 2020. Comments received on the draft COP will be considered prior to a final COP being submitted to the SWRCB. A future SWRCB water right proceeding will be required to impose revised operational requirements relating to the southern Delta water quality objectives on the State Water Project and the Central Valley Project in connection with the COP; until then, compliance with southern Delta water quality objectives remains pursuant to D 1641 and the SWRCB orders described above.

In July 2015, an environmental organization filed an administrative complaint with the SWRCB against the Department and the Bureau alleging violations of, among other things, D 1641 and water quality control plan standards and requesting the SWRCB to take action to address the alleged violations. In August 2015, three environmental groups filed a case in State court seeking to have the SWRCB's April 6, 2015 order relaxing salinity and other Delta water quality standards set aside on grounds that it violated, among other laws, the Clean Water Act, the Public Trust Doctrine and both the State and federal Endangered Species Acts. The Department and the Bureau are named as real parties in interest in the suit. This case was settled in July 2020.

In July 2020, the City of Antioch ("Antioch") and the Department settled an August 2017 lawsuit against the Department seeking substantial damages and injunctive relief on claims the Department breached a 1968 agreement relating to water quality available to Antioch in the Delta. The settlement does not have a material adverse effect on the Department's ability to continue to operate and maintain the State Water Project or on the security for, or the Department's ability to repay, the Series 1 Notes or the Water System Revenue Bonds.

*Federal Endangered Species Act:* The Department joins the Bureau in consultations with the U.S. Fish and Wildlife Service (the "USFWS") and the National Oceanic and Atmospheric Administration-Fisheries (the "NOAAF") regarding the impacts to endangered fish species from the operations of the State Water Project and federal Central Valley Project. This process results in the issuance of biological opinions pursuant to the Endangered Species Act ("ESA"). These biological opinions update prior opinions and authorize the incidental taking of the following federally listed aquatic species by the two projects: Delta smelt, winter-run Chinook salmon, spring-run Chinook salmon, Central Valley steelhead, Green Sturgeon and Southern resident killer whale. Biological opinions are generally valid until changed conditions or new listings of species would require reinitiation of consultation. In August 2016, the Department and the Bureau requested reinitiation of ESA Section 7 consultation with the USFWS and the NOAAF because of updated data demonstrating low Delta smelt populations and extremely low population levels for the winter-run Chinook salmon, impacts from recent droughts, and evolution of science in the area.

On October 21, 2019, the NOAAF and the USFWS issued biological opinions under Section 7 of the ESA for the Reinitiation of Consultation on the Long-Term Operation of the Central Valley Project and State Water Project (the "2019 Biological Opinions"). The Bureau issued a Record of Decision on February 18, 2020 adopting the 2019 Biological Opinions following completion of an Environmental Impact Statement pursuant to NEPA. The 2019 Biological Opinions effectively replaced the 2008 United States Fish and Wildlife Biological Opinion (the "2008 Opinion") and the 2009 National Marine Fisheries Service Biological Opinion (the "2009 Opinion") as the ESA authorizations for the Central Valley Project and the State Water Project.

Under the 2019 Biological Opinions, State Water Project and Central Valley Project operations are to be carried out to maximize exports while supporting listed aquatic species and protecting critical habitats. Operations are based on real-time monitoring. Fishery agencies and water users may make recommendations to the Department and the Bureau regarding the scheduling of water deliveries, and the Bureau and the Department will annually report on water operations as well as seasonal fish performance. Protective criteria apply to reduce the risk of listed species becoming entrained at pumping facilities. Operations also incorporate structured decision-making to implement summer and fall habitat actions to benefit Delta smelt, including but not limited to the use of Suisun Marsh Salinity Control Gates.

On December 2, 2019, a coalition of six environmental organizations, Pacific Coast Federation of Fishermen's Associations, Institute for Fisheries Resources, Golden State Salmon Association, Natural Resources Defense Council, Defenders of Wildlife, and Bay.org d/b/a The Bay Institute, filed suit challenging the 2019 Biological Opinions in *Pacific Coast Federation of Fishermen's Associations, et al. v. Ross, et al.*, Eastern District of California Case No. 1:20-cv-00431-DAD-EPG ("*PCFFA v. Ross*"). As set forth in an amended complaint, the lawsuit brings claims against the NOAAF, the USFWS, the Bureau, and various officials of those federal agencies. The plaintiffs allege that the NOAAF and the USFWS violated the Administrative Procedure Act by concluding in

the 2019 Biological Opinions that the Central Valley Project and State Water Project operations described therein would not result in jeopardy to, or adversely modify critical habitat of, listed species. The plaintiffs also allege that the Bureau violated the ESA by adopting and relying on the 2019 Biological Opinions and failed to adequately analyze the operations under NEPA. The case is before Judge Dale A. Drozd of the United States District Court for the Eastern District of California.

On February 20, 2020, the California Natural Resources Agency, the California Environmental Protection Agency and The People of the State of California, by and through the California Attorney General, filed litigation challenging the legal adequacy of the 2019 Biological Opinions and the operations authorized thereunder. The lawsuit names the following defendants: Wilbur Ross in his official capacity as the United States Secretary of Commerce; Chris Oliver in his official capacity as Assistant Administrator for Fisheries at the National Oceanic and Atmospheric Administration; the National Marine Fisheries Service; David Bernhardt in his official capacity as the United States Secretary of the Interior; Aurelia Skipwith in her official capacity as Director of the USFWS; the USFWS; Brenda Burman in her official capacity as Commissioner of the Bureau; and the Bureau. The case, *California Natural Resources Agency, et al. v. Ross, et al.*, Eastern District of California Case No. 1:20-CV-00426-DAD-EPG ("*CNRA v. Ross*"), is closely related to *PCFFA v. Ross* and is also before Judge Drozd.

The plaintiffs in *CNRA v. Ross* filed an amended complaint on April 21, 2020 expanding their arguments that water operations under the 2019 Biological Opinions are not adequately protective of listed species. The amended complaint alleges that the conclusions in, and the Bureau's adoption of, the 2019 Biological Opinions violated the ESA and the Administrative Procedures Act. The complaint also asserts that the Bureau was required to, but did not, secure an incidental take permit under the California Endangered Species Act (the "CESA"). In addition, the complaint alleges that the Bureau violated NEPA.

The parties have argued motions in both *PCFFA v. Ross* and *CNRA v. Ross*. On May 11, 2020, Judge Drozd issued a ruling that granted, in part, Motions for Preliminary Injunction that were separately filed by the plaintiffs in *PCFFA v. Ross* and *CNRA v. Ross*. The court's order, which expired on May 31, 2020, enjoined export operations in the South Delta under the 2019 Biological Opinions, temporarily reinstating required operations in the 2009 Opinion that restrict pumping by imposing an import-to-export ratio based upon San Joaquin River flow measured at Vernalis, California.

Judge Drozd's May 11, 2020 order did not fully address the Motion for Preliminary Injunction in *PCFFA v. Ross*, holding certain issues related to Shasta Reservoir operations in abeyance for further consideration. Following additional briefing, the court ultimately denied the remainder of the *PCFFA* plaintiffs' Motion for Preliminary Injunction on June 24, 2020.

On June 2, 2020, some defendants in *CNRA v. Ross* filed motions to dismiss the CESA cause of action asserting that, as a state law, CESA does not apply to Central Valley Project operations. The court is currently considering the motions to dismiss based on the papers and has not yet issued a decision. If the court denies the motions to dismiss and the holding is upheld following any appeals, the Bureau may need to seek a permit under CESA from DFW.

The Department believes that should one or more of the aforementioned claims and actions relating to the 2019 Biological Opinions and the operations authorized thereunder result in the invalidation of the 2019 Biological Opinions that this could affect State Water Project yield but would not have a material adverse effect on the Department's ability to continue to operate and maintain the State Water Project or on the security for, or the Department's ability to repay, the Series 1 Notes or the Water System Revenue Bonds.

On January 20, 2021, President Biden issued the Executive Order: "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," which, among other things, requested that the head of the U.S. Department of Commerce review the 2019 Biological Opinions to determine whether they are

inconsistent with, or present obstacles to, the policy and objectives of the Biden Administration. The Executive Order states that if the 2019 Biological Opinions are deemed incompatible with the Biden Administration's policy and objectives, then the head of the U.S. Department of Commerce "shall, as appropriate and consistent with applicable law, consider suspending, revising, or rescinding" them. The Department cannot predict what the result of this review will be or what effect, if any, a determination of incompatibility would have on the 2019 Biological Opinions or on the Central Valley Project and State Water Project operations authorized thereunder.

*State Endangered Species Act.* Delta smelt and winter-run and spring-run Chinook salmon are dual-listed species, meaning they are afforded protections under both the federal ESA and CESA, whereas longfin smelt is listed under CESA but not listed under the federal ESA. Prior to 2020, to obtain the authority under the CESA to "take" the dual-listed species, the Department requested a "consistency determination" from DFW for the recently superseded 2008 Biological Opinion and for the 2009 Biological Opinion. In July 2009, DFW issued its determination that both biological opinions were consistent with CESA. In the absence of a federal listing and an applicable biological opinion, authority to take longfin smelt was provided by an incidental take permit issued by DFW pursuant to CESA.

In 2019, the Department applied for a new incidental take permit covering the dual-listed species – Delta smelt and salmon – and the State listed longfin smelt and began environmental analysis for the long-term operations of the State Water Project in support of its application.

On March 27, 2020, the Department certified a final EIR for the long-term operations of the State Water Project and, on March 31, 2020, DFW issued an incidental take permit covering the operations under CESA. The incidental take permit replaced the Department's prior CESA authorizations. Operations under the incidental take permit use real-time decision-making based on updated modeling, monitoring, and quantitative analyses. The Department and DFW jointly assess risks and, in some circumstances, DFW may make real-time operational decisions when the Department and DFW do not agree. Operations under the incidental take permit provide for a limited amount of increased pumping during storm events when protective criteria are met. The operations incorporate seasonal and daily loss thresholds for salmon, one or more barriers to reduce straying of migrating salmon, more restrictive criteria for longfin smelt, and greater reliance on the Suisun Marsh Salinity Control Gates to improve habitat conditions for Delta smelt. In addition, the State Water Project is responsible for providing dedicated water for summer or fall Delta outflow as well as spring maintenance flows to benefit listed species.

Multiple lawsuits have been filed challenging the Department's and DFW's authorizations related to the incidental take permit. This section describes the lawsuits the Department has received to date. The Department, through the California Attorney General's Office, has returned a Notice of Acknowledgment and Receipt of Service in a timely manner in each of the below cases and effectuated formal service.

The Central Delta Water Agency and South Delta Water Agency provided the Department on May 13, 2020 with a petition and complaint in *Central Delta Water Agency et. al. v. California Department of Fish & Wildlife et al.* The lawsuit alleges that the Department's approval of long-term State Water Project operations violated CEQA, the Delta Reform Act, the 1959 Delta Protection Act, the 1992 Delta Protection Act, the Watershed Protection Act and the Public Trust Doctrine.

The Department received a petition and complaint from North Coast Rivers Alliance, Institute for Fishery Resources, Pacific Coast Federation of Fishermen's Associations, San Francisco Crab Boat Owners' Association, and the Winnemum Wintu Tribe on May 14, 2020. The petition and complaint for this case, *North Coast Rivers Alliance et al. v. Department of Water Resources et al.*, alleges that the Department's actions in approving the long-term State Water Project operations violated CEQA, the Delta Reform Act, the Public Trust Doctrine, and sections 1085 and 1094.5 of the California Code of Civil Procedure. The lawsuit also identifies the Bureau as a real party in interest.

The State Water Contractors, Inc. ("SWC") and Kern County Water Agency ("KCWA") provided a petition to the *Department in State Water Contractors et al. v. California Department of Fish and Wildlife et al.* on May 19, 2020. The petitioners allege that the Department failed to comply with CEQA's procedural requirements and that there is no substantial evidence to support the Department's certification of the final EIR or approval of the selected project alternative. The lawsuit also brings causes of action against DFW, including violations of CESA and CEQA. The petitioners filed a First Amended Petition and Complaint on August 7, 2020, adding causes of action against the Department for breach of contract and breach of good faith and fair dealing. The First Amended Petition and Complaint also added the following petitioners: Antelope Valley-East Kern Water Agency, Central Coast Water Authority, Dudley Ridge Water District, County of Kings, Oak Flat Water District, Palmdale Water District, Santa Clarita Valley Water Agency, San Gabriel Valley Municipal Water District, and Tulare Lake Basin Water Storage District.

On May 19, 2020, Metropolitan and the Mojave Water Agency ("MWA") provided a petition and complaint to the *Department in Metropolitan Water District of Southern California et al. v. California Department of Fish and Wildlife et al.* The petition and complaint alleges that the Department failed to adequately analyze the environmental impact of long-term operations of the State Water Project pursuant to CEQA. In addition, the lawsuit alleges that the incidental take permit includes excessive mitigation and, by accepting the incidental take permit, the Department—and the California Natural Resources Agency as a real party in interest—breached the Water Supply Contracts with Metropolitan and MWA. Similar to the SWC lawsuit, this lawsuit also alleges that DFW violated CESA and CEQA. A First Amended Petition and Complaint, filed on August 5, 2020, added Coachella Valley Water District, San Gorgonio Pass Water Agency, and Municipal Water District of Orange County as petitioners.

The Department received a petition on May 21, 2020 in *Tehama-Colusa Canal Authority et al. v. California Department of Water Resources et al.* The petitioners in this lawsuit either hold or represent parties that hold contracts for water made available by the Central Valley Project, including the Tehama-Colusa Canal Authority, the San Luis and Delta-Mendota Water Authority, the Friant Water Authority, the Glenn-Colusa Irrigation District, Reclamation District No. 108, the Natomas Central Mutual Water Company, River Garden Farms Company, and Sutter Mutual Water Company. The lawsuit alleges that the Department failed to comply with CEQA when analyzing and approving long-term operations of the State Water Project.

On June 4, 2020, the Department received a petition and complaint in *San Bernardino Valley Municipal Water District v. California Department of Water Resources, et al.* Similar to the Metropolitan and SWC cases, this lawsuit alleges that the Department's actions do not comply with CEQA and resulted in breach of contract, and that DFW violated CEQA and CESA. This lawsuit also includes a cause of action against the Department under the takings provisions of the United States and California Constitutions.

On June 11, 2020, the Department received a petition in *San Francisco Baykeeper v. California Department* of *Water Resources, et al.* Petitioners, San Francisco Baykeeper, The Bay Institute, Natural Resources Defense Council, Golden Gate Salmon Association, and Defenders of Wildlife, claim that the Department's actions in approving the long-term State Water Project operations violated CEQA. The petitioners also claim that DFW violated CESA and CEQA.

The Department formally received a petition and complaint on June 23, 2020 in *Sierra Club et al. v. California Department of Water Resources*. The petitioners/plaintiffs are non-governmental organizations, including the Sierra Club, Center for Biological Diversity, Planning and Conservation League, and Restore the Delta. The petition and complaint alleges that the Department has violated CEQA, the Delta Reform Act, and the Public Trust Doctrine.

The eight lawsuits identified above have been coordinated in the Sacramento County Superior Court, CDWR Water Operations Cases, Judicial Council Coordination Proceeding No. 5117. On December 30, 2020, the

Presiding Judge for Sacramento Superior Court assigned Steven M. Gevercer as coordination trial judge. The Department has not yet filed responsive pleadings in any of the lawsuits described in this subsection and no motions are pending. The Department believes that should one or more of these lawsuits be determined adversely to the Department that this would not have a material adverse effect on its ability to continue to operate and maintain the State Water Project or on the security for, or the Department's ability to repay, the Series 1 Notes or the Water System Revenue Bonds.

# Long-Term Planning Efforts for the Delta

The activities and programs described in this section "Long-Term Planning Efforts for the Delta" build on prior activities and programs, including the CALFED Bay-Delta Program begun in 1995 with the participation of various State and federal agencies, as well as California's environmental, urban and agricultural communities, to develop long-term, collectively-negotiated solutions to the environmental and water management issues concerning the Delta.

Delta Stewardship Council and Related Legislation. The Delta Stewardship Council was created pursuant to the Delta Reform Act, part of a legislative package enacted in November 2009. The legislative package attempted to address key aspects of the State's water situation, with emphasis on the Delta. The package included an \$11.1 billion general obligation bond measure, which measure was subsequently amended, including a reduction in the amount of bonds authorized to \$7.1 billion. This \$7.1 billion bond measure was approved by the voters in November 2014. See "STATE WATER PROJECT WATER SUPPLY – Statewide Water Considerations – Sources of Funding for Water Related Improvements" below. The Delta Stewardship Council is charged with developing and implementing a Delta Plan. The Delta Protection Commission, which is a State commission with certain land use responsibilities in the Delta, was directed in the same legislation to prepare an economic sustainability plan for the Delta and to provide information and recommendations to the Delta Stewardship Council. In 2012, the Delta Stewardship Council. The Delta Stewardship Council adopted the Delta Plan, along with regulations to the Delta Stewardship Council. The Delta Stewardship Council also certified the final program EIR for the Delta Plan on that date.

Starting in May 2013, a number of legal actions were filed by certain federal water contractors, Contractors, local water agencies and environmental groups challenging the Delta Plan, associated regulations and the program EIR. The cases were coordinated in a single proceeding in Sacramento Superior Court. The Department has filed an *amicus curiae* brief in support of the Delta Stewardship Council in the litigation. In June 2016, the trial court ruled that the Delta Plan was invalid, until such time as the Delta Stewardship Council would be able to remedy three Delta Plan deficiencies. The Delta Stewardship Council and all but one of the other parties filed appeals with the Court of Appeal challenging the judgments in their respective cases. The Court of Appeal issued its ruling on April 10, 2020 affirming the validity of the Delta Plan, taking into account certain of the amendments described in the next paragraph. Appellants State Water Contractors et al. submitted a petition for rehearing on June 2, 2020, which was denied. Appellants then, on June 22, 2020, filed a petition for review with the California Supreme Court, which was denied on August 12, 2020.

Between the trial court decision and the Court of Appeal decision, the Delta Stewardship Council approved Delta Plan amendments on April 26, 2018, and in May 2018 several groups filed four lawsuits against the Delta Stewardship Council in State court, seeking a writ of mandate and relief directing the Delta Stewardship Council to vacate its approval of the Delta Plan amendments. These four lawsuits were consolidated on March 6, 2020 and are currently pending.

*Water Supply Reliability, Delta Conservation and Infrastructure*. In 2006, the Department, the Bureau, DFW, federal and state fish and wildlife agencies and the agencies that purchase water from the Department and

the Bureau began a planning process to promote and improve the overall ecological health of the Delta and the species that inhabit the Delta and ensure water supply reliability for the Contractors.

This resulted in the proposed Bay Delta Conservation Plan ("BDCP"). In 2015, a change in permitting approach resulted in the BDCP transitioning to the California WaterFix, a proposed two-tunnel water conveyance facility authorized under different provisions of the ESA and CESA, not as part of a Habitat Conservation Plan or Natural Community Conservation Plan under federal and State law. A component of the large-scale environmental restoration in the Delta originally proposed in the BDCP would be implemented through a separate program designated as California EcoRestore (described in part below). In 2017, the Department approved California WaterFix, filed a validation action and worked towards obtaining relevant permits and authorizations necessary for construction and implementation. Several lawsuits ensued as a result of the California WaterFix approval and validation action and were consolidated in the Sacramento Superior Court (Sacramento County Superior Court Case No. 34-2017-80002666).

In his first State of the State Address, delivered on February 12, 2019, Governor Gavin Newsom announced that he did not support California WaterFix and laid out a new direction for Delta conveyance and expressed his support for a revised project consisting of a single tunnel. On April 29, 2019, Governor Newsom issued Executive Order N-10-19, which detailed his new policy direction regarding water issues in the state, including Delta conveyance, and directed several state agencies to take action implementing his policies. The Department assessed the nature and extent of the actions necessary as a result of the Governor's statements and, beginning on May 2, 2019, took several actions in response.

The Department's actions included rescinding all project approvals for California WaterFix and withdrawing its Petition for Change in Points of Diversion and Rediversion and Application for Section 401 Certification of the Clean Water Act. This withdrawal ended the water rights hearing before the SWRCB. In July 2019, the Department and all plaintiffs filed requests for dismissal in the numerous lawsuits that had been filed regarding the California Waterfix following its approval. Plaintiffs and petitioners in these actions moved for fees and costs totaling over \$13 million, which the trial court denied. Plaintiffs and petitioners have appealed, and briefing is currently expected to be completed in summer of 2021.

The Department has begun the environmental review, planning, design and engineering of a proposed single tunnel, smaller capacity project, consistent with Governor Newsom's direction. The Department issued a NOP of an EIR for the proposed project on January 15, 2020. As described in the NOP, the proposed Delta conveyance project includes constructing and operating new facilities in the Delta that would add to the existing State Water Project infrastructure. The new facilities would include intake structures on the Sacramento River and a tunnel to convey water to the existing pumping plants in the south Delta. The proposed Delta conveyance project would be operated in coordination with the existing south Delta pumping facilities, resulting in a system known as "dual conveyance" because there would be two complementary methods to divert and convey water.

Under the direction and authority of the Department, the Delta Conveyance Design and Construction Authority (the "DCA") is providing design and engineering support for the environmental review process. The DCA is also continuing to conduct a stakeholder engagement process with Delta communities to find ways to avoid or minimize local land use concerns and impacts through design and engineering.

On July 24, 2019, the Department and the Contractors began a public negotiation with the goal of reaching an agreement in principle with the Contractors on a conceptual approach to cost allocation and the related financial and water management matters related to this Delta conveyance facility. The negotiations concluded on April 30, 2020 with the announcement of such an agreement in principle that, if approved by the Department and the Contractors, would be the basis for amendment of the Water Supply Contracts. As of the date hereof, 18 Contractors have approved the agreement in principle. Whether and/or the extent to which a conveyance system will be implemented, the final form of any implementation, the process and cost of any implementation, who would pay such costs and the scope and specifics of any conveyance system are all still under discussion with relevant stakeholders.

*Fish and Habitat Restoration Programs*. In October 2010, the Department entered into a Fish Restoration Program Agreement with DFW to coordinate efforts regarding the Department's expenditure of funds for fish benefits. To date the Department has spent approximately \$149 million and expects to spend in total approximately \$321 million for certain habitat restoration activities. These activities are intended to be credited towards CESA and ESA habitat restoration requirements.

Separate from the BDCP and any Delta conveyance facility, the State intends to pursue more than 30,000 acres of Delta habitat restoration. This new approach to improving the ecological health of the Delta, independent from any Delta conveyance facility, has been designated California EcoRestore. Among other things, EcoRestore will implement restoration projects required by the 2008 and 2009 Biological Opinions. EcoRestore is estimated to cost between approximately \$750 million to \$950 million to complete all efforts, of which approximately \$500 million is expected to be paid by the Contractors for the costs of habitat restoration required to mitigate State and federal water project impacts pursuant to the biological opinions. The remaining \$250 million to \$450 million is expected to be funded from other non-State Water Project sources in connection with flood and multi-benefit projects.

# **Central Valley and Delta Levees**

Water delivered to Southern California through the State Water Project must traverse the Delta through channels protected by levees that are susceptible to major failures due to decay, inadequate maintenance, flooding, overtopping and seismic events. If a major levee failure were to occur in the Delta or on the Sacramento River flood control system, it could adversely affect the ability of the Department to deliver water through the Delta. In the event of such a failure, the quality of the Delta's water could be compromised from an increase in salinity and other adverse water quality conditions caused by an influx of water from the San Francisco Bay and could result in curtailing pumping of water from the Delta southward to the Central Valley and Southern California.

After Governor Arnold Schwarzenegger declared an emergency in 2006 for California's Central Valley levee system, including the Delta and Sacramento River flood control systems, and subsequent to the passage of Proposition 1E (the Disaster Preparedness and Flood Prevention Bond Act of 2006) and Proposition 84 (the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006), the Department, the United States Army Corps of Engineers and local flood control agencies have been working together to fund, design and construct levee improvements and repairs. The Department, through its Delta Levees Program, has funded significant repairs and improvements to the Delta levee system. In 2012, the Department, as required by statute with regard to its flood management responsibilities, completed, and the Central Valley Flood Protection Board adopted, a Central Valley Flood Protection Plan that analyzes flood risks and potential measures to address those risks in the Delta and in certain other areas of the California Central Valley. The Department prepared an update to that plan and the Central Valley Flood Protection Board adopted the updated plan in August 2017.

# **Statewide Water Considerations**

*Climate Change*. Climate change caused by human activities is having, and is likely to continue to have, an effect on State water resources, as evidenced by a reduction in mountain snowpack, a rise in sea level, and a change in the amount and seasonal timing of river flows. In the foreseeable future, more of the precipitation in California is likely to fall as rain instead of snow. This potential change in weather patterns will exacerbate flood risks and additional challenges for water supply reliability.

Currently, the Sierra snowpack provides as much as a third of the State's water supply by accumulating snow during winter and releasing it slowly during spring and summer. Warming temperatures will cause the snowpack to melt faster and earlier, making it more difficult to store and use water released by the melting snowpack. Climate change is also expected to result in more variable weather patterns throughout the State. More variability can lead to longer and more severe droughts. In addition, the sea level is expected to continue to rise, potentially threatening the existing channels within the Delta, which could impact the ability of the Department to deliver water through the Delta.

The Department considers the potential effects of climate change in both its project-level and long-term planning. The Department's Climate Action Plan ("CAP") covers both mitigation and adaptation planning and is available on the Department's website. Phase I: Greenhouse Gas Emissions Reduction Plan, originally released in 2012 and updated in July 2020, presents the Department's historical, current and projected future greenhouse gas emissions and establishes the Department's emissions reduction goals and measures. In September 2018, the Department released Phase II: Climate Change Analysis, which provides guidance for the Department's decision making and assists Department project managers in incorporating climate change analysis into their planning for Department activities. Phase III: Climate Change Vulnerability Assessment was released in February 2019, and the accompanying CAP Phase III Adaptation Plan was approved in July 2020. Although it is clear that climate change has affected and will continue to affect the State Water Project, the Department's ability to recover costs necessary to support debt service has not been impacted by the effects of climate change, and it is not expected to impact cost recovery.

Sources of Funding for Water Related Improvements. In 1992, Congress enacted the Central Valley Project Improvement Act (the "CVPIA"), which required, among other things, many environmental restoration studies and projects, the cost of which is to be shared by the federal government and the State. In 1994, the Department entered into a cost sharing agreement with DFW, the Bureau and the USFWS (the "Cost Sharing Agreement") for those projects. The State's cost share is approximately \$175 million and is funded by General Fund appropriations, general obligation bond financing and other sources. The Department does not expect State Water Project funds to be used for such purpose.

In addition to the CVPIA, California voter-approved measures such as Proposition 13 (the Safe Drinking Water, Clean Water, Watershed Protection and Flood Protection Act, approved in 2000), Proposition 50 (the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002), Proposition 84 (the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006) and Proposition 1E (the Disaster Preparedness and Flood Prevention Bond Act of 2006) have or will require the State to undertake a variety of projects for environmental restoration, water use efficiency and conservation, water supply enhancement and reliability, ecosystem restoration, watershed protection, water conveyance, delta levee restoration and water storage planning and studies. These measures authorize the issuance of State general obligation bonds to fund such projects. More recently, in November 2014, the voters approved Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act of 2014, which authorizes \$7.1 billion in general obligation bonds to fund various water projects and programs. These include projects and programs designed to address water quality, safety and reliability, ecosystem and watershed protection and restoration, respond to climate change, water security and drought preparedness, water recycling, groundwater sustainability, flood management and statewide water system operational improvements. Funds provided by this measure are not to be expended to pay the costs of the design, construction, operation, mitigation, or maintenance of Delta conveyance facilities. In June 2018, voters approved Proposition 68 (the California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018). Proposition 68 allocated approximately \$870 million to the Department for multi-benefit projects that achieve public safety improvements and fish and wildlife enhancement, the Salton Sea, urban streams, groundwater support, groundwater grants, the Delta, and floodplain management.

*Programmatic Considerations*. To achieve additional capability of supplying water to the Contractors on a dependable basis at levels of acceptable water quality, the Department is considering additional water facilities

and additional programs for reservoir, groundwater storage, and conservation. Alternatives under consideration include (1) new reservoir storage north and south of the Sacramento-San Joaquin Delta, (2) a Delta conveyance facility, (3) conjunctive use of surface water with groundwater in State Water Project service areas, (4) purchase of water from federal or local sources, and (5) construction of local water supply developments within State Water Project service areas. See "STATE WATER PROJECT WATER SUPPLY – Long-Term Planning Efforts for the Delta – *Water Supply Reliability, Delta Conservation and Infrastructure.*"

*Future Mandates Relating to the Delta.* Water rights issues and environmental regulation with respect to the Delta have been an active area in recent decades. The Department can give no assurances that future legislation or regulation in this area will not result in reductions in the water supply available to the State Water Project. See "STATE WATER PROJECT WATER SUPPLY – State and Federal Regulations Affecting the State Water Project" and "– Long-Term Planning Efforts for the Delta" above.

Invasive Species. Zebra and quagga mussels are established in many regions of the United States. In 2007, quagga mussels were discovered in the lower Colorado River and rapidly spread through the Colorado River Aqueduct into water distribution systems and reservoirs in Southern California. In 2016, quagga mussels were discovered in the West Branch of the State Water Project (Pyramid Lake and Angeles Tunnel). An isolated population of zebra mussels is established in San Justo Reservoir in Central California. The mussels can clog water intakes, trash racks and other protective screens. Once established, the mussels cannot be easily eradicated using current technologies. Mussel management will result in a significant increase in the cost of operation and maintenance of water delivery systems. In addition, there can also be adverse ecological impacts. To prevent the spread of the mussels into the State Water Project, the Delta and other bodies of water and water systems, the Department has joined with DFW, as the lead agency, and other state and federal agencies on a number of activities. These include boat inspections, monitoring of water bodies and water systems and education of the public, especially boat owners and operators. In addition, the Department has developed a Rapid Response Plan, Vector Management Plan, and Long-term Mussel Management and Control Plan, as mandated by the California Fish and Game Code. In 2016, the Department implemented containment measures in the West Branch of the State Water Project in an effort to prevent spread to uninfested waterbodies. The small mussel population (two individual mussels) remains isolated and contained in Pyramid Lake.

In March 2017, nutria were discovered in the State. Nutria are large semi-aquatic rodents native to South America. Nutria create burrows in river banks and feed on wetland vegetation, activities that have the potential to damage levees, create risks to the water supply and compromise flood control measures. As of mid-December 2020, over 2,083 individual nutria had been captured in the State, 105 of which were captured in the southern Sacramento-San Joaquin Delta. The Department is part of a multi-agency nutria eradication project being led by DFW. As part of its effort to assess and manage risk, the Department has prepared an infrastructure protection plan to identify and protect potentially at-risk infrastructure that could be affected by nutria.

*Land Subsidence*. The loss of surface elevation due to removal of subsurface support has occurred across the State. Subsidence is one of the most diverse forms of ground failure, ranging from small or local collapses to broad regional loss of surface elevation. The causes of subsidence are mostly due to human activities. According to the U.S. Geological Survey, the compaction of susceptible aquifer systems caused by excessive groundwater pumping is the single largest cause of subsidence in the State.

Land subsidence caused by groundwater pumping or other causes has decreased aqueduct capacity and operational flexibility in some areas, which has resulted in increased operating costs to maintain water deliveries. The Department has taken a series of actions to minimize the impact of subsidence, such as raising the California Aqueduct concrete liner and installing additional instrumentation. The Department is currently in the design stage of actions to be completed within the next five years to restore the design capacity and operational flexibility of the California Aqueduct. These actions are estimated to cost between \$400 to \$500 million.

In addition, the Department is performing a planning study to identify long-term solutions to address the impacts of subsidence for the next 50 years. This planning study, which has recently begun, will explore alternatives to the traditional California Aqueduct embankment raises that have been performed over the prior 50 years to address subsidence. The planning study is expected to be completed in 2024, and implementation of the plan could begin between 2025 and 2030.

Two-thirds of the roughly 100-miles comprising the most damaged reaches of the California Aqueduct are state/federal joint use facilities, and almost all of the estimated \$400 to \$500 million costs for restoring the design capacity and operational flexibility is within the joint use facilities. Absent other specific state or federal funding, remediation of the California Aqueduct will be funded by the Contractors, with the repairs to joint use facilities cost-shared by the Bureau, pending congressional appropriation.

# WATER SYSTEM PROJECTS

Water System Projects consist of the portion of certain State Water Project facilities financed or expected to be financed with Water System Revenue Bonds. In each case, sources other than proceeds of Water System Revenue Bonds may have been used to pay certain costs of the facility, particularly those costs allocable to purposes other than water conservation and water transportation.

The following table summarizes the capital costs financed by Water System Revenue Bonds for the Water System Projects, and sets forth the capital costs expected as of July 2020 to be financed for such projects from the issuance of Series 1 Notes, Series 2 Notes (expected to be limited to the Oroville Dam Spillways Response, Recovery and Restoration Project), Series 3 Notes, Series 4 Notes and additional Water System Revenue Bonds. The Department has a goal of maintaining level debt service for each new Water System Project.

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

Water System Project	Capital Expenditures Series A through BB & BC	Estimated Future Capital Expenditures <sup>(1)</sup>	Total Capital Expenditures <sup>(5)</sup>
Power plants: Small Hydro Project	¢ 46.6	¢ 0.0	¢ 46.6
• •	\$ 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 <sup>(6)</sup>	13.5
North Bay Aqueduct Alternate Intake	0.0	545.0	545.0
Project Monitor and Control System SWP Communications System Replacement <sup>(5)</sup>	71.5	$\begin{array}{c} 0.0 \\ 0.9 \end{array}$	71.5
Arroyo Pasajero Program	38.4		39.3
	4.9	0.2 4.6 <sup>(6)</sup>	5.1
Hyatt Pump-Turbine Refurbishment	17.9 24.2	4.6 <sup>(0)</sup> 14.9 <sup>(6)</sup>	22.5 39.1
Edmonston Pump Replacement <sup>(5)</sup>			
Delta Facilities Program	356.9	409.3	766.1
Tehachapi East Afterbay <sup>(5)</sup> Perris Dam Remediation <sup>(5)</sup>	70.7 135.1	11.3 113.5	82.0 248.6
Thermalito Powerplant Cleanup and Reconstruction <sup>(7)</sup>	266.1	4.0	248.6 270.2
Oroville Dam Spillways Response, Recovery and Restoration <sup>(7)</sup>	273.2	491.0	764.2
Oroville Dam Safety Comprehensive Needs Assessment <sup>(7)</sup>	1.9	13.4	15.3
FERC Relicensing – State Water Project <sup>(7)</sup>	34.4	65.6	100.0
Facilities Reconstruction and Improvement Project	751.3	2,177.8	2,929.1
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 <sup>(5)</sup>	38.6	0.8 (6)	39.4
East Branch Extension – Phase II <sup>(5)</sup>	270.5	0.0	270.5
South Bay Aqueduct Enlargement and Improvement <sup>(5)</sup>	272.6	1.4	274.0
Total Water System Projects <sup>(8)</sup>	\$4,694.3	\$3,896.3	\$8,590.4

<sup>&</sup>lt;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. Eide Bailly LLP has neither examined nor compiled such projections and, accordingly, Eide Bailly LLP does not express an opinion or provide any other form of assurance with respect thereto. The audit report included in APPENDIX A of this Offering Memorandum relates to the State Water Project's historical financial information. The report does not extend to the projections set forth above and should not be read to do so. These projections were not prepared with a view toward compliance with the guidelines established by the American Institute of Certified Public Accountants for preparation and presentation of prospective financial information.

Footnotes continue on following page.

- <sup>(2)</sup> Sold by the Department in 2001.
- <sup>(3)</sup> Sold by the Department in 2004.
- <sup>(4)</sup> The Department's ownership interest terminated in 2013.
- <sup>(5)</sup> The original Bond Anticipation Bonds ("BABs") for East Branch Extension Phase I Improvements and East Branch Extension Phase II exceeded the projected expenditures. \$44.5 million of the proceeds of the Water System Revenue Bonds 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.
- <sup>(6)</sup> Projects are completed. Amounts are treated as "Estimated Future Capital Expenditures" pending reallocation.
- (7) These projects are each a project authorized under the Water System Revenue Bonds 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.

The Department may issue additional Water System Revenue Bonds in amounts substantially greater than the amounts described in this subsection to finance capital costs allocated to existing Water System Projects or to Water System Projects defined by supplemental resolutions to be adopted in the future. See "THE SERIES 1 NOTES – Security for the Series 1 Notes – *Outstanding Obligations*" and "STATE WATER PROJECT WATER SUPPLY – Long-Term Planning Efforts for the Delta – *Water Supply Reliability, Delta Conservation and Infrastructure*" herein.

# THE WATER SUPPLY CONTRACTS

The Water Supply Contracts between the State, acting by and through the Department (references to the Department in this Section are to the Department acting in such capacity), and the 29 Contractors are substantially uniform with respect to basic terms except with respect to certain payments by Contractors for agricultural water and under the Revenue Bond Amendments (defined below) as noted below. Copies of the Water Supply Contracts between the State and the 29 Contractors are available on request from the Department and on file at the State Treasurer's Office in Sacramento, and reference is made thereto for information with respect to all of the terms and conditions thereof. The following discussion, except as noted, is applicable to each of the 29 Water Supply Contracts, and assumes the effectiveness of the amendments described below under the heading "Monterey Amendment." All but two of the Contractors (Plumas County Flood Control and Water Conservation District and Empire West Side Irrigation District) have signed the Monterey Amendment. Contractors that have accepted the Monterey Amendment as of the date of this Offering Memorandum have over 99 percent of the maximum Table A amounts of all Contractors.

#### **Basic Contract**

*Term.* The Water Supply Contracts are to remain in effect for 75 years, until December 31, 2035 or until all bonds issued to finance construction costs of State Water Project facilities have been repaid, whichever period is longest, subject to an election on the part of each Contractor to receive continued service after such longest period on certain specified continued terms and conditions and other reasonable and equitable terms mutually agreed upon by the Department and the Contractor. See "THE WATER SUPPLY CONTRACTS – Contract Extension Amendment." The final maturity of Water System Revenue Bonds outstanding as of the date hereof is December 1, 2035. See "THE SERIES 1 NOTES – Security for the Series 1 Notes – *Outstanding Obligations*."

Annual Table A Amounts. The year of initial water delivery is estimated in each Water Supply Contract and a table (titled "Table A") in each of the Water Supply Contracts sets forth the maximum annual amounts of water the Contractor may request to be delivered ("Annual Table A Amount"). The Annual Table A Amounts schedule may be changed upon request by the Contractor and approval by the Department, but no such change may be made if it would impair the financial feasibility of the State Water Project.

The Annual Table A Amounts of all 29 Contractors totals 4,172,786 acre-feet of water. See "STATE WATER PROJECT WATER SUPPLY." Water delivered to a Contractor may not be disposed of by the Contractor for use outside the Contractor's territory, subject to certain limited exceptions, without the Department's consent. Restrictions are imposed on changes in the corporate organization of the Contractor.

*Water Supply*. Subject to the availability of funds, the Department is required to make all reasonable efforts consistent with sound fiscal policies, reasonable construction schedules, and proper operating procedures to complete the facilities necessary for water deliveries at the time and in the amounts specified.

The Department must make all reasonable efforts to perfect and protect necessary water rights and must report at least every five years on its ability to meet future water demands.

If the Department cannot complete construction of the aqueducts necessary to deliver water to the Contractor, the Contractor may, under specified circumstances, provide money to the Department necessary to enable the Department to complete construction. In such case, the Department will own and operate the aqueducts, and the amount provided by the Contractor will be credited by the Department against the Contractor's payment obligation under the Water Supply Contracts. Alternatively, the Contractor may connect, at its own expense, to the portion of the aqueduct completed by the Department to receive water to which it is entitled under the Water Supply Contract.

The Department is required to take all reasonable measures to make available water that meets the water quality objectives set forth in the Water Supply Contract.

Allocation of Water Surpluses and Deficiencies. If there is a supply of water in excess of (i) the scheduled deliveries under Table A for all Contractors and (ii) the operational requirements of the State Water Project, Contractors may purchase such surplus water on an interruptible basis. The price of this interruptible water is the incremental cost of delivery.

The Water Supply Contracts also contain provisions for the allocation of water in the event of shortages in water supply. For Contractors that have accepted the Monterey Amendment, the available supply is to be allocated in proportion to Annual Table A Amounts, with reductions for agricultural Contractors and urban Contractors being made on the same basis. See "WATER SUPPLY CONTRACT RELATED LITIGATION – Monterey Amendment Litigation."

For Contractors that have not accepted the Monterey Amendment, there will be a reduction first in the delivery of water for agricultural purposes by an amount not to exceed 50 percent in any one year or a total of 100 percent of the Annual Table A Amount for agricultural water that may be requested in any seven consecutive years. Any additional reductions required will be apportioned among all Contractors irrespective of use. In the event of a permanent shortage there will be a proportionate reduction of the Contractors' Annual Table A Amount.

Contractors may use aqueduct capacity not used for water delivered under the Water Supply Contracts to transport other water procured by them. The Department is not liable for damage arising from shortages due to causes beyond its control. The total amount of Revenues required to be paid under the provisions of the Water Supply Contracts for the payment of debt service on the Series 1 Notes and the Water System Revenue Bonds is not dependent on the amount of water available to be delivered.

*Water Charges*. The Water Supply Contracts in their original form provide for two charges to the Contractor: (a) a Delta Water Charge and (b) a Transportation Charge. The Department and the various subsets of Contractors ("affected Contractors") have entered into an Off-Aqueduct Power Facilities Amendment, an East Branch Enlargement Amendment, a Water System Revenue Bond Amendment, a Coastal Branch Extension Amendment and a South Bay Aqueduct Enlargement Amendment to the Water Supply Contracts (collectively, the "Revenue Bond Amendments") for the purpose of financing certain of the Water System Projects. The Revenue Bond Amendments establish procedures to provide for the payment of construction costs financed with Water System 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 Water System Revenue Bonds allocable to such Water System Projects. Payment of the principal of and interest on each Series 1

Note at maturity is expected to come from the proceeds of a subsequently issued Series 1 Note or of Water System Revenue Bonds and, if such proceeds are not sufficient to make such payment when due, from amounts drawn under the Credit Agreement. Accordingly, payments by the Contractors under the Water Supply Contracts are not expected to be applied to pay principal of and interest on the Series 1 Notes.

The original Delta Water Charge and Transportation Charge each consist of three components: (a) a capital cost component; (b) a minimum operation cost component (operation costs that do not vary with water deliveries); and (c) a variable operation cost component (operation costs that vary with water deliveries). Project Planning Costs are charged under the component to which the costs of the potential project being studied would be charged if such project were constructed or acquired.

The original Delta Water Charge is a charge for each acre-foot of maximum Annual Table A Amount. It is computed so as to return to the Department generally during the term of the Water Supply Contract all "reimbursable" costs of the "project conservation facilities," together with interest thereon. The "project conservation facilities" are defined as certain categories of facilities that conserve water. Such facilities now include the Oroville facilities, the Delta facilities, the San Luis facilities and a portion of the aqueduct leading to the San Luis facilities from the Delta. "Reimbursable" costs are those costs determined by the Department to be allocable to the purposes of water conservation (or, in the case of the Transportation Charge described below, to water transportation). The costs and revenues of power plants that are part of the "project conservation facilities" (including the Oroville Facilities) are included in the determination of the Delta Water Charge.

The original Transportation Charge is computed so as to return to the Department during the term of the contract the "reimbursable" costs of the facilities necessary to deliver water to a Contractor, together with interest thereon. Such facilities include aqueducts, pumping plants and on-aqueduct power facilities, but do not include any of the facilities designated by the Water System Revenue Bonds Resolution as Water System Projects, except for the Alamo Project, Small Hydro Project and Pyramid Hydroelectric Project (which are on-aqueduct power facilities) and except as the Transportation Charge is incorporated by reference in the Water System Revenue Bond Amendment. The costs of the facilities relating to each reach of aqueduct are allocated among all Contractors receiving water through that reach. Each year's capital expenditures are allocated among the Contractors and the allocated amount is required to be paid by each Contractor, together with interest, in not more than 50 equal annual installments within the capital cost component of the Transportation Charge. (In contracts with agricultural water Contractors, these capital costs are repaid by a uniform charge per acre-foot of the Annual Table A Amount of agricultural water that may be requested, which charge is computed so as to return to the Department generally during the Water Supply Contract term such costs with interest).

The capital cost component of the Transportation Charge and all components of the Delta Water Charge are to be repaid with interest at the weighted average of the rates paid on securities issued to finance the State Water Project (except the Department's commercial paper and the Water System Revenue Bonds) and certain other moneys used to finance the State Water Project. The minimum and variable operation, maintenance, power and replacement cost components (the "operation cost components") of the Transportation Charge are paid currently.

The annual net value of power produced by any power plant located on a State Water Project aqueduct is credited to all Contractors receiving water flowing through that power plant in proportion to each Contractor's portion of the total water flowing through the plant during the year. The credit is given in the form of a reduction in the variable operation cost component of each such Contractor's Transportation Charge.

*Payment of Water Charges.* On or before July 1 of each year, the Department furnishes each Contractor with a statement of estimated charges for the capital cost components (including charges under the Revenue Bond Amendments) and the operation cost components of the Delta Water Charge and the Transportation Charge for the following calendar year. The capital cost component payments of the Delta Water Charge and Transportation Charge, the revenue bond charges of the East Branch Enlargement Amendment, Coastal Branch Extension

Amendment, East Branch Extension Amendment and South Bay Aqueduct Enlargement Amendment, and the revenue bond surcharge of the Water System Revenue Bond Amendment are due semiannually, on January 1 and July 1 of the year following receipt of the statement of charges. The operation cost component payments of the Delta Water Charge, Transportation Charge, East Branch Enlargement Amendment and East Branch Extension Amendment and all payment components of the Off-Aqueduct Power Facilities Amendment are due in twelve monthly installments commencing on January 1 of the year following receipt of the statement of charges.

On or about July 1 of each year, the Department determines the rate (per acre-foot) to be charged each Contractor in the following calendar year for the variable operation cost components of the Delta Water Charge and the Transportation Charge. The variable operation cost components in such calendar year are calculated and billed monthly based on metered water deliveries for the preceding month and an updated rate determined at the beginning of such calendar year. Payment of the variable operation cost components is due on the fifteenth day of the month following receipt of the monthly statement of charges and the Department grants a 30-day grace period, which results in an approximately three-month delay between delivery of water and payment of the variable operation cost components.

On July 1 of each year, the Department furnishes each Contractor with a statement showing the difference between the estimated water charges paid and the actual costs incurred in the prior calendar year. The difference is paid by or credited to each Contractor, as applicable, in equal monthly installments commencing on January 1 of the year following the "true-up" calculation. This process results in an approximately two-year delay in the reconciliation of estimated charges paid and actual costs reimbursed to the Department.

Interest from the due date at the interest rate earned by the State's PMIA must be paid on any payment received more than 30 days after the due date. A Contractor's failure or refusal to accept delivery of water does not relieve the Contractor of its payment obligations. A Contractor is obligated to make payments to the Department notwithstanding any individual default by its constituents, assignees or others in the payment to the Contractor of charges levied by the Contractor. In accordance with a statutory requirement, each Water Supply Contract requires that whenever the Contractor fails or is unable to raise sufficient funds by other means the Contractor must levy upon all taxable property in the Contractor's service area a tax or assessment sufficient (with other available moneys) to provide for all payments under the Water Supply Contract.

If the Contractor defaults in payment, the Department may, and under certain conditions is required to, upon six months' notice, suspend water deliveries during the period of default. During such period the Contractor remains obligated to make all payments required by the Water Supply Contract and the Department is not deprived of any other remedy under the Water Supply Contract or law.

#### **Revenues from Financed Facilities**

Revenues received under the Water Supply Contracts from facilities financed with the Series 1 Notes and the Water System Revenue Bonds are available to be pledged to the payment of the Series 1 Notes and the Water System Revenue Bonds, respectively, and are available to be used to pay operating expenses of such facilities. Other income and revenues derived from the Water Supply Contracts are pledged to the purposes and priorities set forth in the Burns-Porter Act, including the payment of certain operation, maintenance and replacement costs of the State Water Project, the payment of debt service on the State general obligation bonds issued under the Burns-Porter Act, the repayment of certain State moneys used for construction, and the payment of costs of acquisition and construction of the State Water Resources Development System (which includes the State Water Project).

#### **Monterey Amendment**

In December 1994, the Department and representatives of certain of the Contractors reached an agreement on comprehensive principles that served as the basis for negotiating amendments to the Water Supply Contracts.

These amendments are collectively known as the "Monterey Amendment." The Monterey Amendment was negotiated subject to the provision of the Water System Revenue Bonds Resolution that the Department shall not agree to any amendment to the Water Supply Contracts that would materially adversely affect the security of the Water System Revenue Bonds.

Water Supply Contract provisions that were amended or added by the Monterey Amendment include provisions relating to the allocation of water (both in the event of a shortage and in the event of surplus), the transfer of the land and related assets of the Kern Fan Element of the Kern Water Bank to KCWA, the operation of certain State Water Project reservoirs, transfers of State Water Project Annual Table A Amounts (including certain transfers from agricultural Contractors to urban Contractors), 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 (adding a corporation yard and an operations center).

In addition, the Monterey Amendment provides for the reduction of annual Water Supply Contract charges in a manner such that Water Supply Contract revenues (taking into account other revenues and credits) are at levels calculated to meet (but not exceed) the following "revenue needs": (1) annual financing requirements (including debt service and coverage) for revenue bonds, including the Water System Revenue Bonds, issued for State Water Project facilities, (2) operation and maintenance expenses of the State Water Resources Development System (which includes the State Water Project, the Davis-Grunsky Act Program and the San Joaquin Drainage Program), (3) debt service on general obligation bonds issued under the Burns-Porter Act, (4) \$4.5 million per year for capital costs of the State Water Project and the San Joaquin Drainage Program for which neither general obligation bond nor revenue bond proceeds are available, and (5) after the provision of at least \$40.5 million per year of reductions in charges to the Contractors, the amounts available and needed for certain "additional State Water Resources Development System purposes."

By August 1999, the Department had executed the Monterey Amendment with 27 of the Contractors. The Contractors that have signed the Monterey Amendment have approximately 99 percent of the maximum Table A amounts and make approximately 99 percent of the annual Water Supply Contract payments (including payments that constitute Water System Revenue Bond Revenues under the Water System Revenue Bonds Resolution). The Department believes that it can administer the State Water Project in a manner such that both the Contractors that have not signed the Monterey Amendment and the Contractors that have signed the Monterey Amendment will receive the benefits and have the obligations provided in their respective Water Supply Contracts, amended or not as the case may be.

Pending litigation relating to the Monterey Amendment is described under "WATER SUPPLY CONTRACT RELATED LITIGATION – Monterey Amendment Litigation."

#### **Contract Extension Amendment**

In May 2013, the Department and the 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 the Department and the Contractors reached a general agreement on principles for such an amendment (the "Agreement in Principle"). The Department and 25 of the Contractors have signed the Agreement in Principle. The County of Butte, the Plumas County Flood Control and Water Conservation District, the San Luis Obispo Flood Control and Water Conservation District and the Santa Barbara Flood Control and Water Conservation District have not signed the Agreement in Principle.

Currently, the Water Supply Contracts are to remain in effect for 75 years, until December 31, 2035 or until all bonds issued to finance construction costs of State Water Project facilities have been repaid, whichever period is longest, subject to an election on the part of each Contractor to receive continued service after such longest period on certain specified continued terms and conditions and other reasonable and equitable terms mutually agreed upon

by the Department and the Contractor. 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 was prepared based on the Agreement in Principle. Under the proposed amendment, the term of the Water Supply Contract for each Contractor that signs an amendment would be extended until December 31, 2085. Also under the proposed amendment, certain provisions that provide for charges to the Contractors for capital costs and certain other costs to be 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 the Department to pay operating and maintenance expenses and debt service in each year as well as to comply with the rate covenant contained in the Water System Revenue Bonds Resolution and the Reserve Account Requirement thereunder.

Other provisions in the proposed amendment would provide for, among other things, an increase in the Department's operating reserves, the establishment of a State Water Resources Development System Reinvestment Account for financing capital projects with accumulated revenues, the establishment of a State Water Resources Development System Support Account to pay for certain State Water Resources Development System expenses not chargeable to the Contractors and the establishment of a Finance Committee consisting of Department and Contractor representatives to serve as a forum for discussions and to provide a channel for recommendations to the Director of Water Resources concerning financial policies of the State Water Project.

In August 2016, pursuant to CEQA, the Department released for public comment a draft EIR for the proposed amendment. The public comment period on the draft EIR closed in October 2016. As required by statute, on September 11, 2018 the Department presented the terms of the proposed amendment in an informational hearing to the Legislature's Joint Legislative Budget Committee. Thereafter, on November 13, 2018, the Director of Water Resources certified and released the final EIR.

On December 11, 2018, the Director of Water Resources approved the contract extension amendment project under CEQA and executed the amendment with Metropolitan. As of January 28, 2021, twenty-one Contractors have executed their extension amendment with the Department. Copies of these amendments are available on the Department's website. Under the terms of the extension amendment, the amendment will only take effect as to all signing Contractors when (1) 24 Contractors, with an aggregate maximum Table A amount exceeding 3,950,000-acre feet, have executed the amendment and (2) all pending litigation addressing the amendment has been resolved, unless either of these conditions is waived by the Department and the Contractors that have signed the amendment.

On December 11, 2018, the Department filed an action in Sacramento County Superior Court seeking to validate the contract extension amendment. In February 2019, four groups filed answers in the validation action in opposition to the Department's request to validate the amendment. One answer was filed by several environmental organizations; the second answer was filed by several other environmental organizations and an Indian Tribe; the third answer was filed by a number of counties and public water agencies, including the County of Butte and the Plumas County Flood Control and Water Conservation District, both of which are Contractors; and the fourth answer was filed by the South Delta Water Agency. Eight Contractors have filed answers in support of the extension amendment. The validation action is in the pre-trial stage.

In January 2019, four environmental organizations in one case and four environmental organizations and an Indian Tribe in another case filed separate actions against the Department claiming that the contract extension amendment is invalid for failure to comply with CEQA and certain other statutes. These same groups also filed opposition answers in the validation action described in the above paragraph. These two lawsuits are also in the pretrial stage. The amendment that ultimately takes effect will comply with the Department's covenant in the Water System Revenue Bonds Resolution not to agree to any amendment to the Water Supply Contracts which would materially adversely affect the security for the Water System Revenue Bonds.

#### WATER SUPPLY CONTRACT RELATED LITIGATION

The Department is a party to several lawsuits respecting the Water Supply Contracts as described below.

#### **Monterey Amendment Litigation**

In May 2003, the trial court approved a settlement agreement among the Department and the other parties in *Planning and Conservation League, et al. vs. Department of Water Resources and Central Coast Water Authority*, a lawsuit that challenged the Monterey Amendment. Under the settlement agreement, the Department agreed, among other things, to act as lead agency in the preparation of a new EIR for the Monterey Amendment. During the preparation and processing of the new EIR, the Department was permitted under the settlement agreement to continue to operate the State Water Project in accordance with the provisions of the Monterey Amendment, including the provisions pertaining to the transfer of land and related assets of the Kern Fan Element of the Kern Water Bank to KCWA. The Department also agreed to pay for certain watershed improvements in Plumas County and to pay the plaintiffs certain amounts for use in implementing the settlement agreement. The plaintiffs agreed to limit the grounds upon which they could challenge the new EIR after it was completed.

The parties to the lawsuit had engaged in settlement discussions after the Court of Appeal, in September 2000, reversed an earlier trial court ruling on the Monterey Amendment EIR. The trial court had found that the designation of the Central Coast Water Authority, rather than the Department, as the lead agency for the Monterey Amendment EIR, violated the California Environmental Quality Act, but that the Monterey Amendment EIR was adequate, and the error as to the lead agency was harmless. As a result of the trial court's ruling, the Department had proceeded to implement the Monterey Amendment, including transferring the Kern Fan Element property to KCWA. The Court of Appeal, however, found that the Monterey Amendment EIR was inadequate in certain respects and remanded the case to the trial court to oversee the Department's preparation of a new EIR and to consider whether the Monterey Amendment may continue to be implemented while the new EIR was being prepared. The May 2003 settlement agreement described in the immediately preceding paragraph addressed these issues.

In accordance with the Court of Appeal's determination, the Department prepared a new EIR 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 County Superior Court challenging the Department's CEQA compliance and the validity of the Monterey Amendment, including the Department's transfer of the Kern Fan Element to the KCWA. In July 2010, the same plaintiffs in the Sacramento County 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 the Kern Water Bank. In addition, in June 2010, two water districts in Kern County filed a separate lawsuit in Kern County Superior Court, challenging primarily the Department's CEQA compliance with respect to the Kern Fan Element transfer from the Department to KCWA. The two lawsuits filed in Kern County Superior Court were transferred to the Sacramento County Superior Court. In December 2012, the Department prevailed on its challenge to the plaintiffs' validation causes of action (including the validity of Kern Fan Element transfer) on the grounds that they were not timely filed. This left only the plaintiffs' CEQA compliance challenges. 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 the impacts on continued use and operation of the Kern Water Bank was deficient. In October 2014, the trial court ordered the Department, 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 and upon completion of the EIR process, 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 Monterey Plus EIR that are new or changed shall be subject to challenge under CEQA by petitioners or other interested parties and that no other challenges that were raised or could have been raised with respect to the Monterey Plus EIR may be raised in any challenge to the revised Monterey Plus EIR. The trial court's decision, therefore, leaves all matters related to the State Water Project and the Monterey Amendment untouched. In December 2014, one set of plaintiffs filed a notice of appeal related to the trial court's final CEQA and validation decisions with the Court of Appeal. 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 challenged the Department's certification of the revised Monterey Plus 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 Department, and in December 2017, the plaintiffs appealed that ruling. The Department, however, does not expect that there would be any material adverse impact on the ability of the Department to meet its payment obligations, including those with respect to the Water System Revenue Bonds, even if the appeals of the trial court's decisions are successful.

#### **Contractor Claims and Tolling and Waiver Agreement**

In 2007 and 2008, the Department entered into a Tolling and Waiver Agreement with 28 of the 29 Contractors. The Contractors that have signed the Tolling and Waiver Agreement have more than 99 percent of the maximum Table A amounts and make more than 99 percent of the annual Water Supply Contract payments (including payments that constitute Water System Revenue Bond Revenues under the Water System Revenue Bonds Resolution). The Tolling and Waiver Agreement, as amended, expires on December 31, 2021.

The Tolling and Waiver Agreement was prompted by a "Notice of Contest" and Victim Compensation and Government Claims Board claim filed by Metropolitan in December 2005. One of the claims made by Metropolitan was that (1) Water System Revenue Bond proceeds had been spent on the capital costs of certain recreation and fish and wildlife enhancement facilities that are a part of or are related to certain water system projects, (2) the Contractors had been charged under the Water Supply Contracts for costs relating to such recreation and fish and wildlife enhancement facilities (the "Recreation Costs"), and (3) such charges are not authorized by State law. In the course of its investigation of Metropolitan's claims, the Department determined that it had spent a portion of Water System Revenue Bond proceeds and commercial paper proceeds on capital costs allocated by the Department to the purposes of recreation and fish and wildlife enhancement. As a result, the Department has issued restated bills to the Contractors for the years 1988 through 2007 to address this situation. The Department also filed with the Treasurer, as trustee under the Water System Revenue Bonds Resolution, a supplemental resolution (and an amendment to such supplemental resolution) determining and designating that the other Department revenues used to pay Water System Revenue Bond debt service were Water System Revenue Bond Revenue B

Under the Tolling and Waiver Agreement (as amended), each signing Contractor agreed, without establishing any precedent for interpretation of the Water Supply Contracts or the Davis-Dolwig Act, (California Water Code sections 11900-11925), to waive and release certain claims, including any claim that the Department was not in compliance with its Water System Revenue Bonds Resolution covenants or that the Contractor had any right to recover anything of value from Bondholders arising out of certain specified issues relating to the past use of commercial paper and Water System Revenue Bond proceeds for the development of public recreation and the enhancement of fish and wildlife.

The Department no longer allocates proceeds of Series 1 Notes, Series 2 Notes, Series 3 Notes, Series 4 Notes or Water System Revenue Bonds to the development of public recreation or fish and wildlife enhancement and, accordingly, neither the Water System Revenue Bonds remaining outstanding nor any additional Water System Revenue Bonds will be treated by the Department as Water System Revenue Bonds, the proceeds of which were

used to pay, directly or indirectly, costs allocable to the development of public recreation or fish and wildlife enhancement.

In addition to the waiver and release provisions, the Tolling and Waiver Agreement, as amended, also tolls (i.e., suspends) until December 31, 2021, the running of the time period and statute of limitations for filing by the Contractors of (1) protests regarding the Department's bills to the Contractors for 2007 through 2022, (2) claims arising from the Department's revisions to prior year invoices that were made to adjust for improper charges to the Contractors for recreation and fish and wildlife enhancement costs, and (3) certain other specified claims. In the meantime, the Department and the Contractors are continuing their efforts to resolve issues that are covered by the Tolling and Waiver Agreement. One such issue was raised in an October 2019 letter the Department received from Metropolitan that asserted, among other items, that a provision in the Water Supply Contracts precludes the Department from seeking reimbursement from the Contractors for their allocated share of claims and damages related to the control, carriage, handling, use, disposal or distribution of State Water Project water prior to delivery of the water to the Contractors. In the opinions of the Department's management and legal counsel, such allocated amounts have been properly included in past bills to the Contractors and will continue to be recoverable from the Contractors in the future under the long-term water supply contracts.

However, no assurance can be given that Contractors will not file additional Notices of Contest, claims and/or lawsuits with respect to the issues under discussion, or that the Department's positions on the issues will prevail, once the Tolling and Waiver Agreement expires.

#### THE CONTRACTORS

The 29 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 39,200 square miles, approximately 25 percent of the State's land area, with a population of approximately 27 million as of July 1, 2019, or about 69 percent of the State's population and approximately 8 percent of the United States' entire population, including Puerto Rico, each as of the same date.

With three exceptions, the Contractors are established as districts under various State statutes providing for the formation of districts for water-related purposes. One Contractor is a city and two are counties. Of the 29 Contractors, 24 provide water primarily for municipal and industrial purposes and five provide water primarily for agricultural purposes.

The State Water Project was designed to be a supplemental source of water for Contractors, not an exclusive source, and Contractors have various other sources of water supply.

Certain of the Contractors also provide other services, including flood control, groundwater replenishment, sewage collection and disposal, solid waste and trash collection and disposal, hydroelectric power generation and first aid, ambulance and paramedical services.

A new State law (SB 634), effective January 1, 2018, reorganizes the Castaic Lake Water Agency (one of the Contractors) and the Newhall County Water District into a new agency to be named the Santa Clarita Valley Water Agency (the "SCVWA"). The SCVWA's initial service area shall be the same as the Castaic Lake Water Agency's service area. The SCVWA shall be the successor in interest to the Castaic Lake Water Agency's Water Supply Contract, including all of the rights, responsibilities and obligations contained therein, and the agency shall succeed to the legal authority held by the Castaic Lake Water Agency for the performance and enforcement of that contract. This reorganization was approved by the Local Agency Formation Commission for the County of Los Angeles and, accordingly, the Department has amended the related Water Supply Contract to reflect SCVWA as the new counterparty.

#### **Governing Bodies**

Eight of the Contractors are governed by county boards of supervisors, 19 by elected boards of directors, and one by its city council. Metropolitan's board of directors consists of representatives appointed by the governing bodies of its constituent public agencies. Boards of supervisors generally include five members who are elected by popular vote. Specially elected governing boards generally include between five and eleven members and are elected by registered voters except for a few districts in agricultural areas, where the vote is based upon ownership of land in the district.

#### Water Rates and Taxation

Rates and charges of the Contractors are generally set by each Contractor's governing body and are not presently subject to any state or federal regulatory agency.

Pursuant to each Water Supply Contract, if in any year a Contractor does not have sufficient funds to make the payments required under the applicable Water Supply Contract, the Contractor shall levy a tax or assessment on the taxable property in its service area in an amount sufficient to provide the required funds. The ability of Contractors to tax for general purposes and to appropriate for general purposes from tax revenue is limited under State law.

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#### **Selected Contractor Data**

The table entitled "Selected Data on the Contractors" sets forth for each Contractor the year in which it was established, its estimated population as of December 31, 2019, and principal water-related activities.

Contractor	Year Established	Estimated December 31, 2019 Population	Principal Water Related Activities
Alameda County Flood Control and Water Conservation District, Zone 7	1967	261,261	Treats, distributes, and stores State water for municipal and agricultural purposes.
Alameda County Water District	1913	356,160	Treats and distributes State water for municipal purposes. Uses State water to replenish groundwater basins for municipal and agricultural purposes as well as for salt water barrier protection for groundwater basins.
Antelope Valley-East Kern Water Agency	1959	470,543	Distributes State water for agricultural purposes. Treats and distributes State water for municipal purposes.
City of Yuba City	1908	71,070	Treats and distributes State water for municipal purposes.
Coachella Valley Water District	1918	290,000	Exchanges State water for water from Metropolitan for storage in underground basins and for distribution for agricultural purposes.
County of Butte	1850	231,256	Distributes State water for municipal purposes.
County of Kings	1893	149,942	Exchanges State water for water from the Tulare Lake Basin Water Storage District for recreational purposes.
Crestline-Lake Arrowhead Water Agency	1962	29,000	Treats and distributes State water for municipal purposes.
Desert Water Agency	1961	89,317	Exchanges State water for water from Metropolitan for storage in underground basins and distribution for municipal purposes.
Dudley Ridge Water District	1963	36	Distributes State water for agricultural purposes.
Empire West Side Irrigation District	1931	12	Distributes State water for agricultural purposes. Exercises surface water rights.
Kern County Water Agency	1961	893,119	Distributes State water to 16 districts for agricultural and municipal use. Replenishes groundwater basins with State water for municipal and agricultural use. Exercises flood control functions.
Littlerock Creek Irrigation District	1892	2,900	Distributes State water for agricultural purposes.
The Metropolitan Water District of Southern California	1928	18,963,000	Transmits and distributes State water and water from the Colorado River to 27 public agencies for municipal, agricultural and groundwater replenishment purposes.
Mojave Water Agency	1960	480,941	Distributes State water for municipal purposes and uses State water to replenish groundwater basins.
Napa County Flood Control and Water Conservation District	1951	139,099	Distributes water for municipal purposes. Exercises flood control functions.
Oak Flat Water District	1964	10	Distributes State water for agricultural purposes.
Palmdale Water District	1918	114,533	Treats and distributes State water for municipal purposes.
Plumas County Flood Control and Water Conservation District	1967	19,517	Distributes State water. Exercises flood control functions.
San Bernardino Valley Municipal Water District	1954	661,546	Uses State water to replenish groundwater basins and for municipal purposes.
San Gabriel Valley Municipal Water District	1959	197,636	Uses State water to replenish groundwater basins.
San Gorgonio Pass Water Agency	1961	91,260	Uses State water to replenish groundwater basins and for municipal purposes.

#### SELECTED DATA ON THE CONTRACTORS

Contractor	Year Established	Estimated December 31, 2019 Population	Principal Water Related Activities			
San Luis Obispo County Flood Control and Water Conservation District	1945	279,083	Has contracted for State water. Exercises flood control functions.			
Santa Barbara County Flood Control and Water Conservation District	1956	390,066	Has transferred its rights under its Water Supply Contract to the Central Coast Water Authority, which will distribute State water for municipal purposes. Exercises flood control functions.			
Santa Clara Valley Water District	1951	1,954,286	Treats and distributes State water for municipal purposes. Distributes State water for agricultural purposes and for replenishment of groundwater basins. Exercises flood control functions.			
Santa Clarita Valley Water Agency (a)	1962	282,460	Treats and distributes State water for municipal purposes.			
Solano County Water Agency	1958	445,458	Distributes State water for municipal purposes. Exercises flood control functions.			
Tulare Lake Basin Water Storage District	1926	23	Distributes State water for agricultural purposes. Exercises surface water rights.			
Ventura County Watershed Protection Control District	1944	472,776	Purchases State water and sub-contracts the entire amount to Casitas Municipal Water District. While Casitas manages the facility, Ventura County has primary responsibility for payment for State water. Exercises flood control functions.			
Total		27,336,310				

(a) See "THE CONTRACTORS."

Source: Department of Water Resources, State Water Project Analysis Office.

#### Water Deliveries and Contractor Payments

The table on the following page shows, for the last five calendar years, historical water deliveries from the State Water Project to each Contractor.

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#### Historical Deliveries of Water from the State Water Project to the Contractors<sup>(1)</sup> (in acre-feet)

	Calendar Year					-
Contractor	2015	2016	2017	2018	2019	Maximum Table A Amount <sup>(2)</sup>
Alameda County Flood Control and Water Conservation					52.200	
District, Zone 7	32,444	53,484	62,109	39,523	52,296	80,619
Alameda County Water District	27,259	27,357	29,036	18,161	21,731	42,000
Antelope Valley-East Kern Water Agency	14,308	41,356	130,071	72,341	78,057	141,400
City of Yuba City	3,004	1,229	1,746	1,715	1,655	9,600
Coachella Valley Water District	37,596	69,422	83,908	139,089	34,588	138,350
County of Butte	2,763	2,518	2,320	3,029	2,955	27,500
County of Kings	1,229	3,660	6,645	3,714	4,929	9,305
Crestline-Lake Arrowhead Water Agency	1,253	1,084	294	1,207	75	5,800
Desert Water Agency	11,217	21,893	31,636	47,746	13,938	55,750
Dudley Ridge Water District	41,733	19,308	64,309	41,006	33,030	50,343
Empire West Side Irrigation District	624	1,822	1,698	1,591	1,938	3,000
Kern County Water Agency	520,758	638,926	1,190,228	613,612	980,684	982,730
Littlerock Creek Irrigation District	-	-	-	-	226	2,300
The Metropolitan Water District of Southern California	573,526	1,083,900	1,624,548	679,544	1,347,162	1,911,500
Mojave Water Agency	8,830	22,284	34,815	5,471	21,930	82,800
Napa County Flood Control and Water Conservation District	11,199	8,993	8,225	11,682	11,285	29,025
Oak Flat Water District	1,077	1,855	2,893	2,289	2,184	5,700
Palmdale Water District	5,836	10,516	13,858	10,210	12,066	21,300
Plumas Co. Flood Control and Water Conservation District	730	387	363	508	436	2,700
San Bernardino Valley Municipal Water District	24,380	62,676	78,496	43,970	78,478	102,600
San Gabriel Valley Municipal Water District	5,760	16,088	22,056	17,055	23,220	28,800
San Gorgonio Pass Water Agency	3,481	10,816	14,946	12,622	14,329	17,300
San Luis Obispo Co. Flood Control and Water Conserv. Dist.	3,473	4,199	2,845	2,427	2,642	25,000
Santa Barbara Co. Flood Control and Water Conserv. Dist. <sup>(3)</sup> .	11,638	34,085	45,324	28,348	20,557	45,486
Santa Clara Valley Water District	82,888	107,164	127,155	119,736	104,985	100,000
Santa Clarita Water Agency <sup>(4)</sup>	29,189	37,828	83,622	42,897	48,345	95,200
Solano County Water Agency	23,836	23,605	28,265	35,072	31,482	47,756
Tulare Lake Basin Water Storage District	17,336	42,387	61,920	51,450	93,273	88,922
Ventura County Watershed Protection District	1,000	3,000	14,251	648	19,538	20,000
TOTAL	1,498,367	2,351,842	3,767,582	2,046,663	3,058,014	4,172,786

(1) Historical deliveries reflect changes resulting from the reclassification of water to or from these water types; flexible withdrawal, Non-State Water Project local water rights, or Non-State Water Project water. Water delivered to Contractors includes, but is not limited to, Table A water; Table A water allocated to a previous year (carryover); water surplus to operational needs; water quality, and Delta requirements; transfer; purchased; and non-State Water Project water.

(2) Reflects permanent transfers of Table A amounts through December 31, 2019. For an explanation of Table A amounts see "THE WATER SUPPLY CONTRACTS-Basic Contract - Annual Table A Amounts."

(3) As of July 1, 1989, Santa Barbara County FCWCD transferred certain of its rights under its Water Supply Contract to certain local water purveyors and users within Santa Barbara County. Thereafter, on September 26, 1991, the local water purveyors and users transferred those rights to the Central Coast Water Authority in consideration for its agreement to provide for the delivery of water under the related Water Supply Contract to the local water purveyors and users. Although the Department did not object to these transfers, the Department considers Santa Barbara County FCWCD to be the party to which the Department is obligated under the Water Supply Contract, and the Department did not release Santa Barbara County FCWCD from its Water Supply Contract obligations.

(4) See "THE CONTRACTORS."

Source: Department of Water Resources, State Water Project Analysis Office.

#### **Payment History**

The Department has not experienced payment delinquencies or defaults by Contractors that have had a materially adverse effect on the operation or maintenance of the State Water Project, or the ability of the Department to pay its obligations when due. Under the Water Supply Contracts, if a Contractor defaults in payment, the Department may, and under certain conditions is required to, upon six months' notice, suspend water deliveries during the period of default. In accordance with a statutory requirement, each Water Supply Contract requires that whenever the Contractor fails or is unable to raise sufficient funds by other means the Contractor must levy upon all taxable property in the Contractor's service area a tax or assessment sufficient (with other available moneys) to provide for all payments under the Water Supply Contract.

#### **COMMERCIAL PAPER RATINGS**

S&P and Moody's have assigned the Series 1 Notes offered hereby ratings of A-1+ and P-1, respectively. Such ratings are based in part upon information provided by the Department. Each rating reflects only the views of the applicable rating agency, and an explanation of the significance and status of such rating may be obtained only from such rating agency. Such ratings are not a recommendation to buy, sell or hold the Series 1 Notes. There can be no assurance that either such rating will continue for any given period of time or that it will not be revised downward or withdrawn entirely if, in the judgment of the applicable rating agency, circumstances so warrant. Any such change in or withdrawal of either such rating could have an adverse effect on the market price or marketability of the Series 1 Notes.

#### THE CREDIT AGREEMENT

The Credit Agreement is a liquidity facility and under certain circumstances, the obligation of the Bank to make loans pursuant to the Credit Agreement will immediately terminate or be suspended and the Bank may suspend the ability of the Department to issue Series 1 Notes, and, in each case, such termination and/or suspension may occur without notice or payment to owners of the Series 1 Notes. See "THE SERIES 1 NOTES – Security for the Series 1 Notes" and "Events of Default" and "Remedies" below.

#### **General Terms**

Pursuant to the Credit Agreement, Bank of America, N.A. (the "*Bank*"), has agreed to extend to the Department a liquidity facility in the form of a revolving line of credit to provide liquidity, if necessary and subject to certain conditions, for the payment of the principal of and accrued interest on any Series 1 Notes at the stated maturity thereof in accordance with the terms of the Credit Agreement. Under the Credit Agreement, the Bank is, subject to certain terms and conditions, obligated to provide up to \$644,383,562 for the purposes set forth therein.

The principal amount of Series 1 Notes paid by the Bank will be limited to \$600,000,000, allowing for \$44,383,562 of accrued interest thereon, which constitutes 270 days of interest at 10% on such maximum principal amount calculated on the basis of actual number of days and a 365 day year.

The Credit Agreement is scheduled to expire on the earliest of (i) October 15, 2021, (ii) the date the Commitment (as defined in the Credit Agreement) is reduced to zero pursuant the terms of the Credit Agreement and (iii) the Business Day (as defined in the Credit Agreement) immediately succeeding the Substitution Date (as defined in the Credit Agreement) but can be extended upon written request by the Department and approval of the Bank, and may terminate earlier as described below.

#### **Events of Default**

Each of the following events shall constitute an "Event of Default" under the Credit Agreement:

(a) the Department shall fail to pay (i) any principal of or interest on any Loan (as defined in the Credit Agreement) or Bank Note (as defined in the Credit Agreement) when due (whether by scheduled maturity, required prepayment, acceleration, demand or otherwise) (other than payments on Loans or the Bank Note due solely as a result of acceleration caused by the Bank, pursuant to the Credit Agreement), or (ii) any Facility Fee (as defined in the Credit Agreement) or any other amount payable thereunder and, in the case of such Facility Fee or other amount, such failure shall continue for a period of three Business Days from the date such obligation was due;

(b) any representation, warranty, certification, or statement made by the Department (or incorporated by reference) in the Credit Agreement, any other Related Document (as defined in the Credit Agreement) or in any certificate, financial statement, or other document delivered pursuant to the Credit Agreement or any Related Documents shall have been incorrect or untrue or misleading in any material respect when made or deemed to have been made;

(c) the Department shall fail to perform or observe any of the certain specified covenants, agreements or conditions contained in the Credit Agreement;

(d) the Department shall fail to perform or observe any other covenant, agreement, or condition (other than those referred to or described in the immediately preceding paragraphs (a), (b), or (c) under the heading "Events of Default" above) contained in the Credit Agreement, the Bank Note or any other Related Document and such failure, if capable of being remedied, shall remain unremedied for 30 days after the earlier to occur of (i) written notice thereof shall have been given to the Department by the Bank or (ii) the date on which such failure shall first become known to the Department;

(e) (i) one or more final unappealable judgments or orders, issued or rendered by a Government Authority (as defined in the Credit Agreement) of competent jurisdiction, for the payment of money in excess of \$25,000,000, individually or in the aggregate, shall be issued or rendered against the Department, and such judgment or order shall continue unsatisfied, unbonded, undismissed and unstayed for a period of 60 days; or (ii) one or more final unappealable judgments or orders or writ or writs or warrant or warrants of attachment, or any similar process or processes issued or rendered by a Government Authority of competent jurisdiction, for the payment of money in excess of \$25,000,000, individually or in the aggregate, shall be issued or rendered against the Department (but only with respect to writ or writs or warrant or warrants of attachment, or any similar process or processes) or any of the Department's Property (as defined in the Credit Agreement) and remain unpaid, unvacated, unbonded or unstayed for a period of 60 days;

(f) (i)(A) the Department shall fail to pay when due and payable any principal of or interest on any Specified Debt (as defined in the Credit Agreement) (including, in each case, without limitation, any principal or sinking fund installments, but excluding, in each case, (i) payments due on Specified Debt owing to a liquidity provider under a liquidity facility solely as a result of acceleration caused by such liquidity provider with respect to such Specified Debt and (ii) any Specified Debt which is in the form of commercial paper notes which are supported as to the payment of principal and/or interest thereof by a credit enhancement or liquidity facility if such failure to make such payment is due solely to the failure of the related credit enhancement or liquidity facility provider to make such payment), and such failure shall continue beyond any applicable period of grace specified Debt; or (B) any other default under any indenture, contract or instrument providing for the creation of or concerning such Specified Debt, or any other event, shall occur and shall continue after the applicable grace period, if any, specified in such agreement or instrument, if the effect of such default or event is to accelerate, or to permit the acceleration of, the maturity of such Specified Debt; (ii) the Department shall fail to pay when due and payable any principal of or interest on any Senior Lien Obligations (as defined in the Credit Agreement) or any Parity Debt (as defined in the Credit Agreement) other than as described in the foregoing clause (i) of this paragraph (f) (including, in each case, without limitation, any principal or sinking fund installments), and such failure shall continue beyond any applicable period of grace specified in any underlying indenture, contract or instrument providing for the creation of or concerning such Senior Lien Obligations or Parity Debt; or any other default under any indenture, contract or instrument providing for the creation of or concerning such Senior Lien Obligations or Parity Debt; or any other default under any indenture, contract or instrument providing for the creation of or concerning such Senior Lien Obligations or Parity Debt; or any other event, shall occur and shall continue after the applicable grace period, if any, specified in such agreement or such Senior Lien Obligations or Parity Debt; or (iii) (A) the Department shall fail to pay when due and payable any principal of or interest on any other Debt (as defined in the Credit Agreement) of the Department having a principal amount in excess of \$25,000,000 and such failure shall continue beyond any applicable period of grace specified in any underlying indenture, contract or instrument providing for the creation of or concerning such other Debt, or any other event, shall occur and shall continue after the applicable grace period, if any, specified in such agreement or any underlying indenture, contract or instrument providing for the creation thereof, or (B) any other default under any indenture, contract or instrument providing for the creation of or concerning such other Debt, or any other event, shall occur and shall continue after the applicable grace period, if any, specified in such agreement or instrument, if the effect of such default or event is to accelerate, or to permit the acceleration of, the maturity of such other debt;

(i) the Department shall commence any case, proceeding or other action (A) under any (g) existing or future law of any jurisdiction, domestic or foreign, relating to bankruptcy, insolvency, reorganization or relief of debtors, seeking to have an order for relief entered with respect to it, or seeking to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, marshaling of assets, adjustment, winding-up, liquidation, dissolution, composition or other relief with respect to it or its debts or (B) seeking appointment of a receiver, trustee, examiner, liquidator, custodian or other similar official for it or for all or any substantial part of its assets, or the Department shall make a general assignment for the benefit of its creditors; or (ii) there shall be commenced against the Department any case, proceeding or other action of a nature referred to in clause (i) of this paragraph (g) which (x) results in an order for such relief or in the appointment of a receiver, trustee, examiner, liquidator, custodian or similar official or (y) remains undismissed, undischarged or unbonded for a period of 60 days; or (iii) there shall be commenced against the Department, any case, proceeding or other action seeking issuance of a warrant of attachment, execution, distraint or similar process against all or any substantial part of its assets, which results in the entry of an order for any such relief which shall not have been vacated, discharged, or stayed or bonded pending appeal within 60 days from the entry thereof; or (iv) the Department shall take any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the acts set forth in clause (i), (ii), or (iii) of this paragraph (g) or fail to contest in good faith any such appointment or proceeding; or (v) the Department shall admit in writing its inability to pay its debts generally as they become due, or shall become insolvent within the meaning of Section 101(32) of the United Stated Bankruptcy Code;

(i) any provision of applicable law or the Credit Agreement, the Series 1 Notes, the Bank (h) Note, the Issuing and Paying Agent Agreement (as defined in the Credit Agreement), the Resolution (as defined in the Credit Agreement) or any other Related Document related to the payment of principal or interest on the Series 1 Notes, Bank Note or Loans or the pledge of and Lien on the Bond and Note Revenues (as defined in the Credit Agreement) or the Collateral (as defined in the Credit Agreement) shall at any time for any reason cease to be valid and binding or fully enforceable on the Department or shall be declared to be null and void, invalid or unenforceable as determined by any Governmental Authority of competent jurisdiction in a final nonappealable judgment or as a result of any legislative or administrative action by any Governmental Authority having jurisdiction over the Department, or (ii)(a) the validity or enforceability of any provision of applicable law or the Credit Agreement, the Series 1 Notes, the Bank Note, the Issuing and Paying Agent Agreement, the Resolution or any other Related Document related to the payment of principal or interest on Series 1 Notes, the Bank Note or Loans or the pledge of and Lien on the Bond and Note Revenues or the Collateral shall be publicly repudiated or repudiated in writing or publicly contested or contested in writing by the Department or (b) any Governmental Authority having appropriate jurisdiction over the Department shall make a finding or ruling or shall enact or adopt legislation or issue an executive order or enter a judgment or decree which contests the validity or enforceability of any material provision of the Credit Agreement, the Series 1 Notes, the Bank Note, the Issuing and Paying Agent Agreement, the Resolution or any other Related Document related to the payment of principal or interest on the Series 1 Notes, Bank Note or Loans or the pledge of and Lien on the Bond and Note Revenues or the Collateral, or (c) the Department shall publicly deny or deny in writing that it has any or further liability or obligation under the Credit Agreement, Series 1 Notes, the Bank Note, the Issuing and Paying Agent Agreement, the Resolution or any other Related Document (other than the Fee Agreement, the Offering Memorandum, the Dealer Agreement or any exhibit or schedule to any of the Related Documents), or (iii) any material provision of the Credit Agreement, Series 1 Notes, the Bank Note, the Issuing and Paying Agent Agreement, the Resolution or any other Related Document other than a provision described in clause (i) and (ii) of this paragraph (h) shall at any time for any reason cease to be valid and binding on the Department, or shall be declared in a final nonappealable judgment by any court having jurisdiction over the Department to be null and void, invalid, or unenforceable, or the validity or enforceability thereof shall be denied or contested by the Department;

(i) (i) the Department shall impose, declare or announce (whether or not in writing) a debt moratorium, debt restructuring, debt adjustment or comparable extraordinary restriction on the repayment when due and payable of the principal of or interest on any Specified Debt (including, without limitation, the Series 1 Notes, the Bank Note or the Loans) or any Parity Debt or (ii) any Governmental Authority having appropriate jurisdiction over the Department shall impose, declare or announce (whether or not in writing) as a result of a finding, ruling or other determination or shall enact or adopt legislation or issue an executive order or enter a judgment or decree which results in a debt moratorium, debt restructuring, debt adjustment or comparable extraordinary restriction on the repayment when due and payable of the principal of or interest on the Series 1 Notes, the Loans or Bank Note or on all Parity Debt;

(j) (i) the long term unenhanced rating by any of Fitch, Moody's or S&P (each as defined in the Credit Agreement) (in each case to the extent such Rating Agency (as defined in the Credit Agreement) is then providing a rating) on any long term unenhanced Senior Lien Obligations shall be withdrawn or suspended (for credit related reasons) or reduced below "A2" (or its equivalent), "A" (or its equivalent) or "A" (or its equivalent) respectively, or (ii) (x) the long term unenhanced rating by Fitch, Moody's and S&P (in each case to the extent such Rating Agency is then providing a rating) on any Senior Lien Obligations shall be withdrawn or suspended (for credit related reasons) or reduced below "Baa3" (or its equivalent), "BBB-" (or its equivalent) and "BBB-" (or its equivalent), respectively or (y) if at any time the Rating Agencies provide a long term unenhanced rating on any Parity Debt (including, without limitation, the Series 1 Notes), such long term unenhanced rating is withdrawn or suspended (for credit related reasons) or reduced by Fitch, Moody's and S&P (in each case to the extent such Rating Agency is then providing a rating) on any time the Rating Agencies provide a long term unenhanced rating on any Parity Debt (including, without limitation, the Series 1 Notes), such long term unenhanced rating is withdrawn or suspended (for credit related reasons) or reduced by Fitch, Moody's and S&P (in each case to the extent such Rating Agency is then providing a rating) below "Baa3" (or its equivalent), "BBB-" (or its equivalent) and "BBB" (or its equivalent), respectively;

(k) an "Event of Default" as defined in the Resolution or the Issuing and Paying Agent Agreement shall occur and be continuing or the Department shall default in the due performance or observance of any material term, covenant or agreement contained in any other Related Document and the same shall not have been cured within any applicable cure period;

(l) (A) (i) the Department or any Governmental Authority shall impose, declare or announce (whether or not in writing) a debt moratorium, debt restructuring, debt adjustment or comparable extraordinary restriction on the repayment when due and payable of the principal of or interest on any indebtedness of the Department other than as set forth in paragraph (i) under the heading "Events of Default" above; or (ii) there shall be appointed or designated with respect to the Department an entity such as an organization, board, commission, authority, agency or body to monitor or declare a financial emergency or similar state of financial distress with respect to the Department, or there shall be declared by the Department or by any legislative or regulatory body with competent jurisdiction over the Department; or (B) the Department shall not pay, or be unable to pay, its debts generally as they become due; or

(m) dissolution or termination of the existence of the Department.

#### Remedies

Upon the occurrence of any Event of Default, other than an Event of Default specified in paragraph (g) under the heading "Events of Default" above, the Bank may declare the Bank Note and the Loans, all accrued interest thereon, and all other amounts payable under the Credit Agreement to be forthwith due and payable, whereupon the Bank Note and the Loans and such interest and all such amounts shall become and be forthwith due and payable without presentment, demand, protest or further notice of any kind, all of which are thereby expressly waived by the Department. If any Event of Default specified in paragraph (g) under the heading "Events of Default" above shall occur, without any notice to the Department or any other act by the Bank, the Bank Note and the Loans, together with accrued interest thereon, and all other amounts payable under the Credit Agreement, shall become forthwith due and payable, without presentment, demand, protest, or other notice of any kind, all of which are thereby expressive thereby waived by the Department.

Upon the occurrence of any Event of Default described in clause (i) of paragraph (a), clause (i) of paragraph (e), subclause (A) of clause (i) of paragraph (g), clause (i) of paragraph (h), paragraph (i), clause (ii) of paragraph (j) or paragraph (m) under the heading "Events of Default" above (each a "*Special Event of Default*"), (i) the Commitment shall automatically and immediately terminate with respect to all Series 1 Notes and the Bank shall have no obligation to make any Loan or to fund any outstanding Series 1 Note, and (ii) the Bank shall use commercially reasonable efforts to deliver a Notice of Termination (as defined in the Credit Agreement) to the Issuing and Paying Agent and the Dealer; *provided, however*, that the failure to do so shall in no way affect the automatic and immediate termination of the Commitment under the Credit Agreement.

Upon the occurrence of an Event of Default that is not a Special Event of Default, the Bank may, by notice to the Department, terminate the Commitment, if any (except as provided below), deliver a Notice of No Issuance (as defined in the Credit Agreement) to the Department and Issuing and Paying Agent directing the Issuing and Paying Agent to cease issuing all Series 1 Notes, whereupon no additional Series 1 Notes shall be issued, the Available Principal Commitment (as defined in the Credit Agreement) shall immediately be reduced to the then outstanding principal amount of Series 1 Notes and the Available Interest Commitment (as defined in the Credit Agreement) shall immediately be reduced to the amount of interest to accrue on such outstanding Series 1 Notes, and the Available Commitment shall be further reduced in a similar manner as and when such Series 1 Notes mature; *provided* that the Commitment shall not terminate, and the right of the Bank to accelerate the maturity of the Bank Note and the Loans shall not effect the obligation of the Bank to make Loans in an aggregate principal amount equal to the Commitment to the extent necessary for the Department to make required payments of principal on the Series 1 Notes issued and sold prior to the date upon which the Notice of No Issuance is received by the Issuing and Paying Agent; *provided further* that if any Loans are made that would not have been made but for the application of the immediately due and payable on the date such Loans are made.

Upon the occurrence of an Event of Default under clause (ii) of paragraph (h) under the caption "Events of Default" above, the obligation of the Bank to make Loans under the Credit Agreement shall be suspended from the time of the occurrence of such Event of Default until a final, non-appealable judgment of a court having jurisdiction in the premises shall be entered declaring that all contested provisions of the Credit Agreement, the Series 1 Notes, the Bank Note, the Issuing and Paying Agent Agreement, the Resolution or any other Related Document relating to the payment of principal or interest on the Series 1 Notes, the Bank Note or any Loans or the validity or enforceability of the pledge of and lien on the Collateral are upheld in their entirety. In the event a judgment is entered declaring that all material contested provisions the Credit Agreement, the Series 1 Notes, the Bank Note, the Issuing and Paying Agent Agreement, the Resolution and any other Related Document relating to the payment of principal or interest on the Series 1 Notes, the Credit Agreement, the Series 1 Notes, the Issuing and Paying Agent Agreement, the Resolution and any other Related Document relating to the payment of principal or interest 1 Notes, the Bank Note or any Loans or the validity or enforceability of the Issuing and Paying Agent Agreement, the Resolution and any other Related Document relating to the payment of principal or interest 1 Notes, the Bank Note or any Loans or the validity or enforceability of the pledge of and lien on the Collateral are upheld in their entirety, the obligation of the Bank to make Loans under the Credit Agreement shall be automatically reinstated and the terms of the Credit Agreement will continue in full force and effect (unless the Credit Agreement shall have otherwise expired or terminated in accordance with the terms

thereof or there has occurred a Special Event of Default) as if there had been no suspension. In the event any provision of the Credit Agreement, the Series 1 Notes, the Bank Note, the Issuing and Paying Agent Agreement, the Resolution or any other Related Document relating to the payment of principal or interest on the Series 1 Notes, the Bank Note or any Loans or the validity or enforceability of the pledge of and lien on the Collateral is declared to be null and void or unenforceable, or it is determined that the Department has no liability or obligation under the Credit Agreement, the Series 1 Notes, the Bank Note, the Issuing and Paying Agent Agreement, the Resolution or any other Related Document, then the obligations of the Bank under the Credit Agreement will terminate as set forth therein. Notwithstanding the foregoing, if, upon the date which is the earlier of the Commitment Termination Date (as defined in the Credit Agreement) or one (1) year after the effective date of such suspension of the obligation of the Bank pursuant to this paragraph, litigation is still pending and a judgment regarding the validity and enforceability the Credit Agreement, the Series 1 Notes, the Bank Note, the Issuing and Paying Agent Agreement, the Resolution or any other Related Document relating to the payment of principal or interest on the Series 1 Notes, the Bank Note, the Issuing and Paying Agent Agreement, the Resolution or any other Related Document relating to the payment of principal or interest on the Series 1 Notes, the Bank Note, the Issuing and Paying Agent Agreement, the Resolution or any other Related Document relating to the payment of principal or interest on the Series 1 Notes, the Bank Note or any Loans or the validity or enforceability of the pledge of and lien on the Collateral as is the subject of such Event of Default has not been obtained, then the Commitment and the obligation of the Bank to make Loans thereunder shall at such time terminate without notice or demand.

Upon the occurrence of a Default described under clause (ii) of paragraph (g) or clause (iii) of paragraph (g) under the caption "Events of Default" above, the obligation of the Bank to make Loans under the Credit Agreement shall be suspended until the proceeding referred to therein is terminated prior to the court entering an order granting the relief sought in such proceeding. In the event such proceeding is terminated, the obligation of the Bank to make Loans under the Credit Agreement shall be reinstated and the terms of the Credit Agreement will continue in full force and effect (unless the obligation of the Bank to make Loans hereunder shall have otherwise expired or terminated in accordance with the terms thereof or there has occurred a Special Event of Default) as if there had been no such suspension.

Failure to take action in regard to one or more Events of Default shall not constitute a waiver of, or the right to take action in the future in regard to, such or subsequent Events of Default.

#### CERTAIN INFORMATION CONCERNING THE BANK

The liquidity provider for the Series 1 Notes is Bank of America, N.A. (referred to herein as the "Bank").

Bank of America, N.A. (the "Bank") is a national banking association organized under the laws of the United States, with its principal executive offices located in Charlotte, North Carolina. The Bank is a wholly-owned indirect subsidiary of Bank of America Corporation (the "Corporation") and is engaged in a general consumer banking, commercial banking and trust business, offering a wide range of commercial, corporate, international, financial market, retail and fiduciary banking services. As of September 30, 2020, the Bank had consolidated assets of \$2.157 trillion, consolidated deposits of \$1.811 trillion and stockholder's equity of \$213.875 billion based on regulatory accounting principles.

The Corporation is a bank holding company and a financial holding company, with its principal executive offices located in Charlotte, North Carolina. Additional information regarding the Corporation is set forth in its Annual Report on Form 10-K for the fiscal year ended December 31, 2019, together with its subsequent periodic and current reports filed with the Securities and Exchange Commission (the "SEC").

The SEC maintains a website at <u>www.sec.gov</u> which contains the filings that the Corporation files with the SEC such as reports, proxy statements and other documentation. The reports, proxy statements and other information the Corporation files with the SEC are also available at its website, <u>www.bankofamerica.com</u>.

The information concerning the Corporation and the Bank is furnished solely to provide limited introductory information and does not purport to be comprehensive. Such information is qualified in its entirety by the detailed information appearing in the referenced documents and financial statements referenced therein.

The Bank will provide copies of the most recent Bank of America Corporation Annual Report on Form 10-K, any subsequent reports on Form 10-Q, and any required reports on Form 8-K (in each case, as filed with the SEC pursuant to the Securities Exchange Act of 1934, as amended), and the publicly available portions of the most recent quarterly Call Report of the Bank delivered to the Comptroller of the Currency, without charge, to each person to whom this document is delivered, on the written request of such person. Written requests should be directed to:

Bank of America Corporation Office of the Corporate Secretary/Shareholder Relations One Bank of America Center 1BAC 28th floor NC1-028-28-03 Charlotte, NC 28255

PAYMENTS OF PRINCIPAL AND INTEREST ON THE SERIES 1 NOTES WILL BE MADE AT MATURITY FROM MONEYS RECEIVED BY THE ISSUING AND PAYING AGENT FROM OR ON BEHALF OF THE DEPARTMENT; PROVIDED, HOWEVER, TO THE EXTENT SUCH MONIES ARE INSUFFICIENT, SUBJECT TO THE TERMS AND CONDITIONS OF THE CREDIT AGREEMENT, SUCH PRINCIPAL AND INTEREST SHALL BE PAID FROM ADVANCES MADE BY THE BANK TO THE ISSUING AND PAYING AGENT UNDER THE CREDIT AGREEMENT. ALTHOUGH THE OBLIGATION OF THE BANK TO FUND ADVANCES, SUBJECT TO THE TERMS AND CONDITIONS SET FORTH IN THE CREDIT AGREEMENT, IS A BINDING OBLIGATION OF THE BANK, THE SERIES 1 NOTES ARE NOT DEPOSITS OR OBLIGATIONS OF THE CORPORATION OR ANY OF ITS AFFILIATED BANKS AND ARE NOT GUARANTEED BY ANY OF THESE ENTITIES. THE SERIES 1 NOTES ARE NOT INSURED BY THE FEDERAL DEPOSIT INSURANCE CORPORATION OR ANY OTHER GOVERNMENTAL AGENCY AND ARE SUBJECT TO CERTAIN INVESTMENT RISKS, INCLUDING POSSIBLE LOSS OF THE PRINCIPAL AMOUNT INVESTED.

The delivery of this information shall not create any implication that there has been no change in the affairs of the Corporation or the Bank since the date of the most recent filings referenced herein, or that the information contained or referred to under this heading "CERTAIN INFORMATION CONCERNING THE BANK" is correct as of any time subsequent to the referenced date.

The information set forth under this heading "CERTAIN INFORMATION CONCERNING THE BANK" has been furnished by the Bank and no representation is made by the Department or the Dealers as to the accuracy or completeness of such information. The Bank has no responsibility for the form and content of this Offering Memorandum, other than solely with respect to the information describing the Bank set forth under this heading "CERTAIN INFORMATION CONCERNING THE BANK" and has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Offering Memorandum or any information or disclosure contained herein, other than solely with respect to the information describing the Bank set forth under this heading "CERTAIN INFORMATION CONCERNING THE BANK" or omitted herefrom.

#### LITIGATION

No litigation is pending or threatened concerning the validity or enforceability of the Series 1 Notes. Except as described above under the heading "The Water Supply Contracts – Monterey Amendment Litigation," no litigation is pending or threatened concerning the validity or enforceability of the Water Supply Contracts.

At any given time, including the present, there are a number of civil actions pending against the Department, which could, if determined adversely to the Department, affect the Department's expenditures and in some cases, its revenues. However, based in part upon discussions with the Attorney General, the Department does not believe there are any pending actions that are likely to have a material adverse effect on the Department's ability to pay principal of and interest on the Series 1 Notes when due.

#### TAX MATTERS

Note Counsel has not taken and does not intend to take any action to update such opinion or to determine if interest on the Series 1 Notes is presently excluded from gross income for federal income tax purposes.

In the opinion of Orrick, Herrington & Sutcliffe LLP, Note Counsel to the Department, delivered on May 1, 2020, based on an analysis of existing laws, regulations, rulings and court decisions, and assuming, among other matters, the accuracy of certain representations and compliance with certain covenants, interest on the Series 1 Notes, when the Series 1 Notes are issued in accordance with the Resolution and the Tax Certificate, will be excluded from gross income for federal income tax purposes under Section 103 of the Code and is exempt from State of California personal income taxes. The amount treated as interest on the Series 1 Notes and excluded from gross income will depend upon the taxpayer's election under Internal Revenue Service Notice 94-84. Note Counsel also opined that interest on the Series 1 Notes is not a specific preference item for purposes of the federal alternative minimum tax. Note Counsel expressed no opinion regarding any other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the Series 1 Notes. A complete copy of the opinion of Note Counsel is set forth in APPENDIX B. Note Counsel has not taken and does not intend to take any action to update such opinion or to determine if interest on the Series 1 Notes is presently excluded from gross income for federal income tax purposes.

The Code imposes various restrictions, conditions and requirements relating to the exclusion from gross income for federal income tax purposes of interest on obligations such as the Series 1 Notes. The Department has made certain representations and covenanted to comply with certain restrictions, conditions and requirements designed to ensure that interest on the Series 1 Notes will not be included in federal gross income. Inaccuracy of these representations or failure to comply with these covenants may result in interest on the Series 1 Notes being included in federal gross income, possibly from the date of issuance of the Series 1 Notes. The opinion of Note Counsel assumes the accuracy of these representations and compliance with such covenants. Note Counsel has not undertaken to determine (or to inform any person) whether any action taken (or not taken) or events occurring (or not occurring) or any other matters coming to Note Counsel's attention after the delivery of its Note Counsel opinion referenced above may adversely affect the value of, or the tax status of interest on, the Series 1 Notes. Accordingly, the opinion of Note Counsel is not intended to, and may not, be relied upon in connection with any such actions, events or matters.

Although Note Counsel is of the opinion that interest on the Series 1 Notes is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes, the ownership or disposition of, or the amount, accrual or receipt of interest on, the Series 1 Notes may otherwise affect the beneficial owner's federal, state or local tax liability. The nature and extent of these other tax consequences depends upon the particular tax status of the beneficial owner or the beneficial owner's other items of income or deduction. Note Counsel expresses no opinion regarding any such other tax consequences.

Current and future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the Series 1 Notes to be subject, directly or indirectly, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent beneficial owners from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals, clarification of the Code or court decisions may also affect the market price for, or marketability of, the Series 1 Notes. Prospective purchasers of the Series 1 Notes should consult their own tax advisors regarding any pending or proposed federal or state tax legislation, regulations or litigation, as to which Note Counsel expresses no opinion.

The opinion of Note Counsel was based on legal authority current at the time of its delivery to the Department, covers certain matters not directly addressed by such authorities, and represents Note Counsel's judgment as to the proper treatment of the Series 1 Notes for federal income tax purposes. It is not binding on the Internal Revenue Service ("IRS") or the courts. Furthermore, Note Counsel cannot give and has not given any opinion or assurance about the future activities of the Department, or about the effect of future changes in the Code, the applicable regulations, the interpretation thereof or the enforcement thereof by the IRS. The Department has covenanted, however, to comply with the requirements of the Code.

Unless separately engaged, Note Counsel is not obligated to defend the Department or the beneficial owners regarding the tax-exempt status of the Series 1 Notes in the event of an audit examination by the IRS. Under current procedures, parties other than the Department and their appointed counsel, including the beneficial owners, would have little, if any, right to participate in the audit examination process. Moreover, because achieving judicial review in connection with an audit examination of tax-exempt notes is difficult, obtaining an independent review of IRS positions with which the Department legitimately disagrees may not be practicable. Any action of the IRS, including but not limited to selection of the Series 1 Notes for audit, or the course or result of such audit, or an audit of bonds presenting similar tax issues may affect the market price for, or the marketability of, the Series 1 Notes, and may cause the Department or the beneficial owners to incur significant expense.

#### FINANCIAL STATEMENTS

The financial statements of the State Water Resources Development System as of and for the year ended June 30, 2019 (with comparative amounts for the year ended June 30, 2018) (the "2019 Audited Financials"), appearing in APPENDIX A to this Offering Memorandum have been audited by Eide Bailly LLP (the "Auditor"), independent auditors, as set forth in the report of the Auditor appearing in APPENDIX A. Vavrinek, Trine, Day & Co., who joined with the Auditor as of July 22, 2019, audited the financial statements of the State Water Resources Development System as of and for the year ended June 30, 2018. The financial statements of the State Water Resources Development System as of and for the year ended June 30, 2020, are expected to be available in March 2021, and the Department expects to post these financial statements through the Electronic Municipal Market Access ("EMMA") website of the Municipal Securities Rulemaking Board (the "MSRB").

The State Water Resources Development System includes the State Water Project, the Davis-Grunsky Act Program and the San Joaquin Drainage Program.

The Department's 2019 Audited Financials were completed and filed with the MSRB through its EMMA website in early May 2020, which is later than the Department has typically finalized its audited financial statements for previous years. Several factors contributed to the additional time needed to finalize the 2019 Audited Financials. First, Department management is in the process of completing a detailed review of processes and procedures for the Department's accounting and financial systems. In addition, recently designed internal checks and balances helped identify inconsistencies in the application of technical pronouncements from the Governmental Accounting Standards Board Statement and generally accepted accounting principles. Lastly, the Department relies on many different legacy systems for cost recovery, bond accounting and general ledger accounting for which a detailed reconciliation of various systems has been implemented but not yet completed.

#### **APPROVAL OF LEGAL PROCEEDINGS**

Orrick, Herrington & Sutcliffe LLP, Note Counsel, has delivered to the Department its approving opinions related to the issuance of Series 1 Notes. A copy of such opinion is set forth in APPENDIX B to this Offering Memorandum. The opinion is subject to the additional matters described herein under the caption "TAX MATTERS."

#### **CERTAIN RELATIONSHIPS**

The Dealers and their respective affiliates comprise full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. In the ordinary course of their respective businesses, the Dealers and certain of their respective affiliates have engaged, are engaged, and may in the future engage, in investment banking and/or commercial banking transactions and/or advisory services with the Department. The Dealers and their respective affiliates may have, from time to time, performed and may in the future perform, various investment banking services for the Department for which they received or will receive customary fees and expenses. In the ordinary course of their various business activities, the Dealers and their respective affiliates may and actively trade debt and equity securities (or related derivative securities and financial instruments which may include bank loans and/or credit default swaps) for their own accounts and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment securities activities may involve securities and instruments of the Department.

No Dealer is acting as a financial advisor or a municipal advisor (as such term is defined in Section 975(e) of the Dodd-Frank Wall Street Reform and Consumer Protection Act) to the State in connection with the issuance, offering or sale from time to time of the Series 1 Notes.

#### ADDITIONAL INFORMATION AND CONTINUING DISCLOSURE

The Series 1 Notes are exempt from Rule 15c2-12 of the Securities and Exchange Commission relating to continuing disclosure of annual financial information and certain material events and, accordingly, the Department is not required to file reports with the Securities and Exchange Commission in connection with the Series 1 Notes. The Department will make available, upon request, copies of its most recent Audited Financial Statements, Official Statement relating to its Water System Revenue Bonds, the Credit Agreement and the Resolution. Requests for any of the foregoing should be directed to:

State of California Department of Water Resources 1416 Ninth Street, Room 805 Sacramento, CA 95814 Attention: Chief, Division of Fiscal Services

In addition, the Department has covenanted for the benefit of the holders and beneficial owners of certain of its Water System Revenue Bonds to provide certain financial information and operating data relating to the Department by not later than 270 days following the end of the Department's fiscal year (which fiscal year as of the date hereof ends June 30) (the "Annual Report") and to provide notices of the occurrence of certain enumerated events. Unless otherwise directed by the MSRB or the Securities and Exchange Commission, the Annual Report and notices of such enumerated events will be filed by the Department with the MSRB through its Electronic Municipal Market Access website.

#### **APPENDIX A**

#### FINANCIAL STATEMENTS OF THE STATE WATER RESOURCES DEVELOPMENT SYSTEM



#### DEPARTMENT OF WATER RESOURCES

STATE WATER RESOURCES DEVELOPMENT SYSTEM An Enterprise Fund of the State of Californ

Comprehensive Annual Financial Report for the fiscal years ended June 30, 2019 and 2018



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

*Comprehensive Annual Financial Report for the fiscal years ended June 30, 2019 and 2018* 



### STATE OF CALIFORNIA

Gavin Newsom, Governor

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

Gary Lippner Deputy Director

Kathie Kishaba Deputy Director

Ted Craddock Deputy Director (Acting)

Kris Tjernell Deputy Director

Michael Day Deputy Director

Spencer Kenner Chief Counsel

Taryn Ravazzini Deputy Director

#### **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

Lori Lay, Accounting Administrator II Rachel Corbett, Accounting Administrator II Cynthia Quach, Accounting Administrator I Abby Hernandez, Accounting Administrator I Geeta Devi, Accounting Administrator I Omid Torabian, Accounting Administrator I Jesse Gonzalez-Perez, Accounting Administrator I Eleanor De Anda, Accounting Administrator I Tina Nguyen, Accounting Administrator I Thu Nguyen, Associate Accounting Analyst Jeanet Uy, Associate Accounting Analyst Linh Chieng, Associate Accounting Analyst Jesus Parrilla, Associate Accounting Analyst Sharon Chu, Associate Accounting Analyst Carla Elder, Associate Accounting Analyst Nakithia Thomas, Senior Accounting Officer Alex Caputo, Senior Accounting Officer Michelle Wong-Chiu, Senior Accounting Officer Salvin Sharma, Senior Accounting Officer Maigia Yang, Accountant Officer Iesha Williams, Executive Secretary Loan Tran, Office Technician

## SENIOR MANAGEMENT AND KEY FINANCIAL OFFICERS



#### Karla Nemeth DIRECTOR

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.



#### Ted Craddock ACTING DEPUTY DIRECTOR, STATE WATER PROJECT

Ted Craddock became the Acting State Water Project Deputy Director on July 5, 2019. Mr. Craddock has been with the Department for over 24 years. Prior to becoming the Acting State Water Project Deputy Director, he served as Executive Manager of the Oroville emergency recovery effort and provided leadership for the State Water Project's dam safety and infrastructure initiatives. Prior to that appointment, Mr. Craddock held the positions of Chief of the Hydropower License Planning and Compliance Office, manager of the East Branch Extension program, and Advisor to the State Water Project Deputy Director. Mr. Craddock received a Bachelor of Science degree in Civil and Materials Engineering from the University of California, Davis and is a licensed Professional Engineer.

#### SENIOR MANAGEMENT AND KEY FINANCIAL OFFICERS

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#### 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. He manages and directs the activities of the Budget Office, General Accounting Branch, Enterprise Accounting Branch, Financial Analysis and Risk Management Office, and the Administration/Out-of-State Travel/Master Data Office. Vinay is also responsible for the 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 as 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 for various multinational software companies from 1997 through 2010.

Vinav 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.



#### 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.



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 Structure in Butte County, California, July, 2011.

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# INTRODUCTORY SECTION

The large diameter discharge lines at the Ira J. Christian Wind Gap Pumping Plant under construction during the winter of 1970. THIS PAGE INTENTIONALLY LEFT BLANK



April 28, 2020

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 years ended June 30, 2019 and 2018, along with the Independent Auditor's 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 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)<sup>1</sup>. 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 3,108 full-time staff throughout the State, of which approximately 2,188 are allocated to the System. The Director of DWR oversees the Department's activities, with the assistance of a Chief Deputy Director and nine Deputy Directors. The Director, Chief Deputy Director, Deputy Director for the State Water Project, and Chief Counsel are each appointed by the Governor.

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

1 See the accompanying MD&A for more on Enterprise Funds

2 See the accompanying MD&A for more on the System's Segments

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

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.

## 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 with varying termination dates ranging between 2035 and 2042 (depending upon when an individual contract was first signed) 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 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 remains 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 provisions 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 Overview

# A MACROECONOMIC VIEW

Under normal circumstances, the Department's day-to-day operations are not materially impacted by fluctuations in global or national economic conditions. Generally, 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.

While financial market conditions were generally favorable for the Department during the fiscal year ended June 30, 2019, at the time of the publication of this CAFR, world, national and regional impacts from the COVID-19 pandemic have dramatically altered the operating and financial landscape for the Department and the businesses and residents of California. The following economic overview primarily focuses on various economic metrices during the period covered by the CAFR (fiscal year ended June 30, 2019) but also includes commentary regarding the initial impacts that have occurred to the financial markets as a result of "shelter in place" orders and their impact on businesses and the residents of California. These adverse events that have occurred subsequent to the period covered by the CAFR continue at the time of this publication and their duration and full impact is unknown.

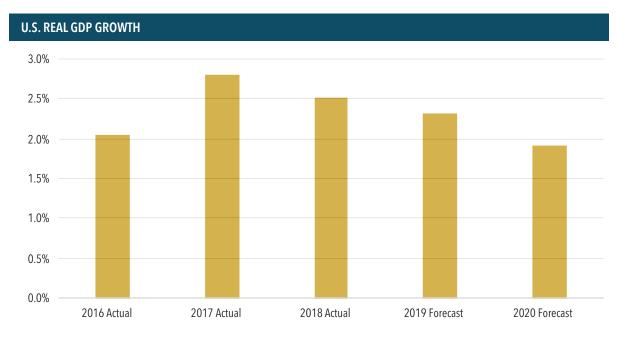
During the fiscal year ended June 30, 2019, U.S. economic growth slowed in the second quarter of calendar 2019, with real GDP growing by 2.0%, compared to 3.1% in the first quarter.<sup>4</sup> Gradual monetary policy normalization brought the Fed Funds rate back up to 2.2-2.50% target level in December 2018, the highest levels since 2008. Higher tariffs and uncertainty about future policies are, however, likely to moderate investment growth, and growth may continue to decline going forward, with current forecasts calling for U.S. Real GDP growth of about 2.3% in 2019 and 1.9% in 2020.<sup>5</sup> As of June 2019, the forecasted probability of a recession in the next 12 months was 13.6%.<sup>6</sup>

<sup>4</sup> US Bureau of Economic Analysis

<sup>5</sup> Federal Reserve Bank of Chicago

<sup>6</sup> Federal Reserve Bank of New York

Estimates of the impact of the COVID-19 pandemic on U.S. real GDP vary widely but indicate that 2020 real GDP may be reduced by roughly 5% for each month of a partial economic shutdown.<sup>7</sup> For example, a two-month shutdown would equal a 10% decline in real GDP. The impact has been to push the U.S. and California economies into recession.



In energy markets, the Henry Hub natural gas spot price averaged \$3.05 per million British thermal units (MMBtu) during fiscal year 2019. It is forecast to average \$2.50 per MMBtu in the second half of calendar year 2019, and \$2.77 in 2020 as supply growth begins to moderate.<sup>8</sup>

<sup>7</sup> Mercatus Center, George Mason University

<sup>8</sup> US Energy Information Administration



As of April 20, 2020, the Henry Hub natural gas spot price was \$1.96 as industrial demand for natural gas has declined as a result of COVID-19.

# **CALIFORNIA ECONOMY**

According to the UCLA Anderson School of Management June 2019 Outlook, the California economy expanded in the first half of calendar year 2019. In June 2019, the unemployment rate had risen one-tenth of one percent for the quarter to 4.3%, compared with 2.4% in June 2018. The June 2019 California unemployment rate was 0.6% higher than the national unemployment rate of 3.7%. The UCLA Anderson forecast anticipates that California's average unemployment rate will be at 4.4% by 2 UCLA Anderson projects total employment growth for 2020 of 0.8%, with payrolls growing at the same rate.<sup>9</sup> In the first quarter of 2019, California's personal income grew 1.50%, versus growth in U.S. personal income of 1.51%.<sup>10</sup> UCLA Anderson also forecasts real California personal income growth to be 2.9% and 1.9% percent in calendar years 2019 and 2020, respectively. In fiscal year 2019, California's all urban consumer annualized price inflation was 2.84%, compared with 3.9% for fiscal year 2018.<sup>11</sup> California's median home price hit an all-time high in May 2019 of \$611,190, up 1.7% from May 2018.<sup>12</sup>

Since the beginning of COVID-19 stay-at-home orders in California in mid-March 2020, 2,824,000 Californians have filed unemployment claims. This equals 14.5% of the state labor force.<sup>13</sup> Nationally, new home listings are down 30%

- 11 State of California Department of Industrial Relations
- 12 California Association of Realtors
- 13 U.S. Bureau of Labor Statistics

<sup>9</sup> UCLA Anderson School of Management Forecasts

<sup>10</sup> Federal Reserve Bank of St. Louis

compared to the same period in 2019. It is too soon to measure the impact of the COVID-19 recession on California home sales or median home price.

The State reported that Preliminary General Fund agency cash for June 2019 exceeded the 2019-20 Budget Act forecast of \$143.804 billion by about \$1.041 billion and fiscal year 2018-19 revenues were \$1.041 billion higher than the forecast of \$143.804 billion.<sup>14</sup>

Through March 31, 2020, the State Controller's Office reported that revenues for the fiscal year were \$2.1 billion higher than forecast. However, no financial reports are yet available that reflect the impact of the delay of state income tax and capital gains tax receipts until July 15, 2020, the rise in unemployment, the increase in the cost of other social services and the cost of combatting COVID-19. The State Controller has indicated that the State and local resources are being quickly drained.<sup>15</sup>

# **INTEREST RATES**

Long-term tax-exempt interest rates declined during fiscal year 2019. As of June 30, 2019, the 20-year "AAA" tax-exempt borrowing rate was approximately 2.12%, versus 2.82% as of June 30, 2018. Variable rate tax-exempt rates at fiscal year-end were higher than they were in the summer of 2018 as the Federal Reserve continued to tighten monetary conditions. As of June 30, 2019, variable rate tax-exempt rates were 1.90%, versus 1.51% a year earlier.<sup>16</sup>

As a result of the extreme volatility in the financial markets caused by the impacts of COVID-19, both short and long-term tax-exempt interest rates rose dramatically in the first quarter of calendar year 2020. With the help of Federal programs designed to provide liquidity to the financial markets and financial institutions, both short and long-term interest rates have returned to levels close to those that existed before the crisis. As stay-at-home orders are still in effect throughout the state and country, it is not known whether the financial markets in which the Department operates and the rates at which it borrows will be maintained at their current relatively attractive levels.

In the fiscal year ended June 30, 2019, the Department sold two long-term bond issues. In October of 2018, the Department sold its tax-exempt \$215,295,000 Central Valley Project Water System Revenue Bonds, Series AZ with a final maturity of 2035, a weighted average maturity of 9.0 years and an average borrowing cost of 2.90%. In April 2019, the Department sold \$299,590,000 its tax-exempt Central Valley Project Water System Revenue Bonds, Series BA with a final maturity of 2035, a weighted average maturity of 10.3 years and an average borrowing cost of 2.37%.

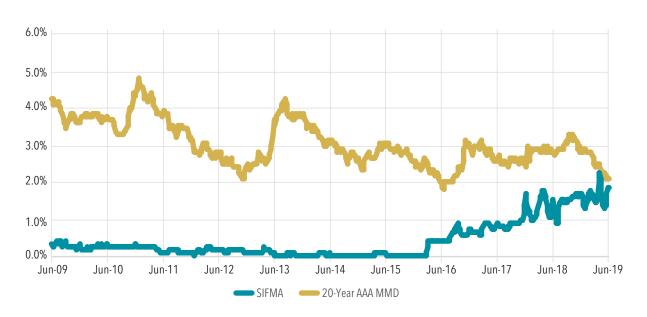
The Department has not issued any additional long-term bonds since the end of fiscal year 2019.

<sup>14</sup> State of California Department of Finance

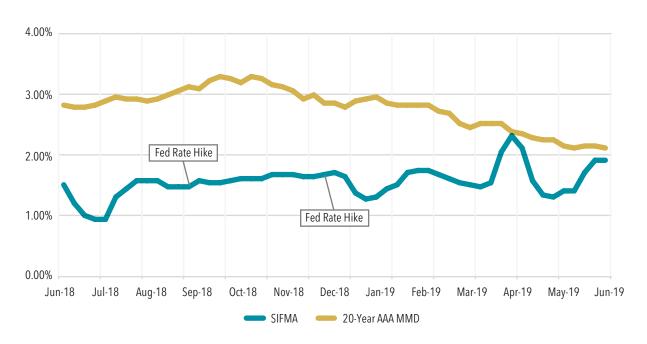
<sup>15</sup> California State Controller, California Fiscal Focus, April 2020

<sup>16</sup> Thompson-Reuters TM3









# 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 (in Millions)

Water System Project	Capital Expenditures Series A through BA	Estimated Future Capital Expenditures <sup>(1)</sup>	Total Capital Expenditures (5)		
Power plants:	<b>_</b>				
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 (2)	80.2	0.0	80.2		
South Geysers Project (3)	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)	36.2	0.9	37.1		
Arroyo Pasajero Program	4.9	0.2	5.1		
Hyatt Pump-Turbine Refurbishment	17.9	4.6 (6)	22.5		
Edmonston Pump Replacement (5)	24.2	14.9 (6)	39.1		
Delta Facilities Program	272.8	502.1	774.9		
Tehachapi East Afterbay (5)	70.7	11.3	82.0		
Perris Dam Remediation (5)	124.5	92.6	217.1		
Thermalito Powerplant Cleanup and Reconstruction (7)	238.0	32.7	270.7		
Oroville Dam Spillways Response, Recovery and Restoration (7)	273.2	262.6	535.8		
Oroville Dam Safety Comprehensive Needs Assessment (7)	1.9	23.1	25.0		
FERC Relicensing – State Water Project (7)	25.7	74.3	100.0		
Facilities Reconstruction and Improvement Project	566.7	1,381.9	1,948.5		
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)	270.5	0.0	270.5		
South Bay Aqueduct Enlargement and Improvement <sup>(5)</sup>	271.9	1.7	273.6		
Total Water System Projects (8)	\$4,375.3	\$2,991.1	\$7,366.2		

(1) 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. Eide Bailly, LLP has neither examined nor compiled such projections and, accordingly, Eide Bailly, LLP does not express an opinion or provide any other form of assurance with respect thereto.

(2) Sold by the Department in 2001.

(3) Sold by the Department in 2004.

(4) The Department's ownership interest terminated in 2013.

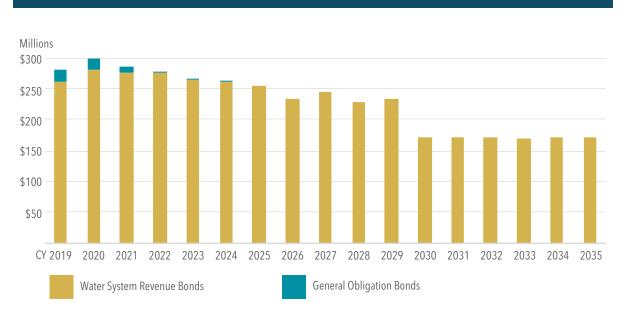
(5) The original Bond Anticipation Bonds ("BABs") for East Branch Extension - Phase I Improvements and East Branch Extension - Phase II exceeded the projected expenditures. \$44.5 million of the proceeds of the Series AE refunding of the BABs was redistributed from East Branch Extension - Phase I Improvements 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.

(8) Totals may not sum due to rounding.

## STATE WATER PROJECT DEBT PROFILE

The Department currently has \$4 billion of total debt outstanding. These amounts include revenue bonds, general obligation bonds, commercial paper, and SB 84 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 2019 to the final maturity of the Department's bonds in 2035, annual debt service payments will gradually decline from approximately \$300 million to approximately \$170 million.



#### ANNUAL DEBT SERVICE

## 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 February 2018, the program was increased to \$800 million and to \$1.1 billion in October 2018. The Department maintains a combined short-term borrowing capacity of \$1.4 billion to fund other Water System Projects capital costs and Oroville Dam Spillway repairs. The Department expects FEMA reimbursement for up to 75% of eligible repair costs. The Department has received approximately \$234.3 million of approved FEMA reimbursement as of April 25, 2020. 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 2019, \$661.9 million of short-term borrowing has been incurred for Oroville Dam Spillway repairs.

# STATE WATER CONTRACTORS

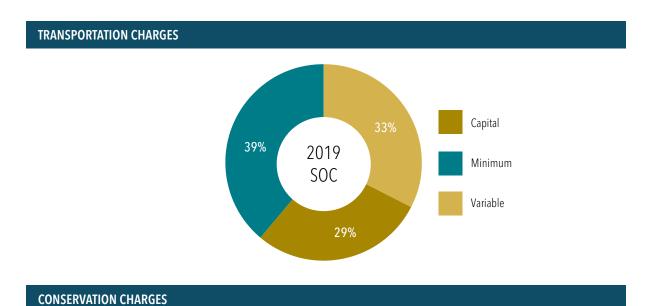
# **CONTRACTOR SHARE OF PAYMENTS**

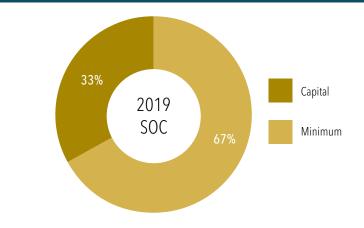
The State Water Contractors are billed each July for projected operating and capital costs for the upcoming calendar year. These Annual Statements of Charges include three types of charges:

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

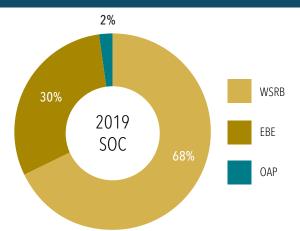
The capital, minimum and variable charges are applied in the following five main areas:

- 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)

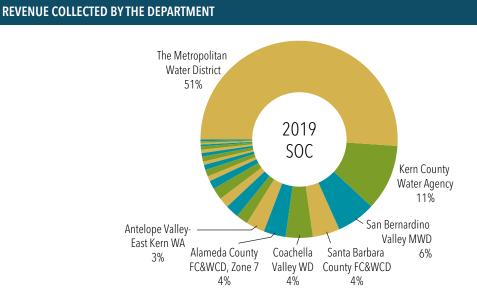




**OFF AQUEDUCT POWER FACILITY CHARGES** 

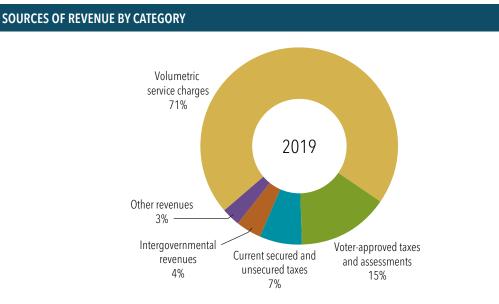


The 29 State Water Contractors pay for the costs of the State Water Project through a combination of monthly and semi-annual charges. In 2019, seven of the Water Contractors have accounted for more than 84 percent of water system revenues.



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 24%.

UPPER FEATHER RIVER		
County of Butte		27,50
Plumas County Flood Control & Water Conservation District		2,70
City of Yuba		9,60
	Subtotal	39,80
NORTH BAY AREA		07,00
Napa County Flood Control & Water Conservation District		29,02
Solano County Water Agency		47,75
	Subtotal	76,78
SOUTH BAY AREA		., .
Alameda County Flood Control & Water Conservation District, Zone 7		80,61
Alameda County Water District		42,00
Santa Clara Valley Water District		100,00
,	Subtotal	222,61
SAN JOAQUIN VALLEY		-
Oak Flat Water District		5,70
County of Kings		9,30
Dudley Ridge Water District		45,3
Empire West Side Irrigation District		3,00
Kern County Water Agency		982,73
Tulare Lake Basin Water Storage District		87,47
	Subtotal	1,133,55
CENTRAL COAST		
San Luis Obispo County Flood Control & Water Conservation District		25,00
Santa Barbara County Flood Control & Water Conservation District		45,48
	Subtotal	70,48
SOUTHERN CALIFORNIA		
Antelope Valley-East Kern Water Agency		144,84
Castaic Lake Water Agency		95,20
Coachella Valley Water District		138,35
Crestline-Lake Arrowhead Water Agency		5,80
Desert Water Agency		55,75
Littlerock Creek Irrigation District		2,30
The Metropolitan Water District of Southern California		1,911,50
Mojave Water Agency		85,80
Palmdale Water District		21,30
San Bernardino Valley Municipal Water District		102,60
San Gabriel Valley Municipal Water District		28,80
San Gorgonio Pass Water Agency		17,30
Ventura County Watershed Protection District		20,00
	Subtotal	2,629,54
	Total State Water Project	4,172,78



71% 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 Water 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 contract extension amendment has now been prepared based on the AIP. Under the 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 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. Other provisions addressed in the 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, the Department of Water Resources (DWR) presented the terms of the proposed contract extension 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 Director of DWR certified and released the final EIR in November 2018.

On December 11, 2018, the Director of DWR approved the contract extension amendment project under CEQA and executed the amendment with Metropolitan. As of April 1, 2020, twenty one Water Contractors have executed the extension amendment with the Department. Under the terms of the extension amendment, the amendment will only take effect as to all signing Water Contractors when (1) 24 Water Contractors, with an aggregate maximum Table A amount exceeding 3,950,000-acre feet, have executed the amendment and (2) all pending litigation addressing the amendment has been resolved, unless either of these conditions is waived by the Department and the Water Contractors that have signed the amendment.

Three lawsuits are now pending that address the amendment, and those lawsuits are discussed in Note 10.

# **RENEWABLE ENERGY**

In accordance with the Renewable Energy Procurement Plan, that has been revised to meet Senate Bill (SB) 100's zero-emissions energy by 2045, DWR has achieved it procurement targets thru 2020. The System plans to procure approximately 1,080 GWh's of renewable energy by 2030. Purchase agreements for such power include:

- A 20-year contract with RE Camelot Solar Photovoltaic Project<sup>17</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 MWh's 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 MWh's 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 MWh's of annual generation.

<sup>17</sup> Owned and operated by Dominion Solar Holdings, Inc.

# 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 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.

# **P STREET PAPER REDUCTION PROJECT**

Historically, the Department of Water Resources (DWR) has been a paper-based driven organization. Although information technology has advanced to support more economical and efficient management of records and information collection, many existing business processes have not changed and reliance on paper-based forms, documents, and reports are embedded in our procedures. While these represent critical business records that are used by DWR's various business areas and record retention compliance must be kept, this has resulted in millions of paper records/documents.

In its recent content inventory, the Business Services Office's (BSO) Records and Content Management (RCM) identified approximately 39,000 boxes of paper documents exist in the Divisions/Offices that are moving, which must be reviewed and reduced to the fullest extent possible by May 2021. DWR will accomplish this through purging (recycling or confidential destruct), long-term storage/archiving, retaining, and/or digitizing.

# FINANCIAL MANAGEMENT ENHANCEMENTS PROGRAM

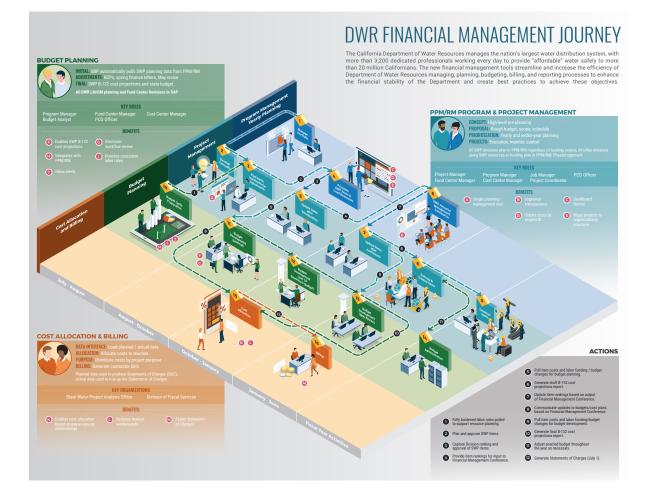
The Financial Management Enhancements Program (FMEP) is embarking on a multi-dimensional solution that will affect change for people, process, and technology. Based upon previous experience with past projects, DWR expects it cannot make the necessary improvements solely through technology. Technology upgrades require changes for people and processes, as well as a sustainable and robust training program.

Within the People work stream, DWR is redesigning its training program and conducting organizational change management activities. In the Process work stream, DWR is standardizing business processes, developing a new planning and budgeting process, and will be revising the billing process. FMEP seeks to standardize the business process for program and project management in key activities such as planning and forecasting, budgeting, initiation, and closure. The goals are to align processes across SWP, strengthen oversight and control, and incorporate portfolio prioritization and resource allocation into the business process. FMEP seeks to create a single planning and budgeting process that allows SWP and DWR to plan for project and program activity costs, prepare the State Budget, and prepare the B-132 Cost Projections used in the preparation of the Statements of Charges. The objective is to reduce the overall level of effort to produce the three distinct work products, reduce the "budget" data calls, and improve the visibility and usability of budget and cost projection data. FMEP seeks to automate the manual processes for integrating B-132 Cost Projection data and Debt Service and to incorporate the requirements for the new Pay-As-You-Go calculation method into

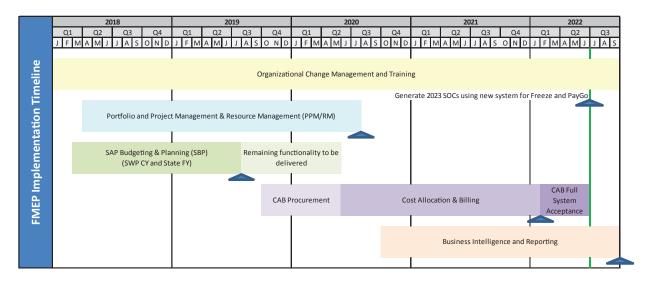
the billing process. The goals of these changes are to reduce manual processes performed by SWP staff, account for both the existing calculation methodology (Freeze) and Pay-As-You-Go, and incorporate the debt service schedule into the cost calculation process.

In the Technology work stream, DWR intends to upgrade its core technologies and its cost allocation and billing system. The FMEP core technology seeks to provide SWP with a set of integrated technologies for planning, program management, project management, budgeting, billing, and reporting. The project intends to integrate the cycle of planning, program and project management, cost allocation, and billing into a single uniformed platform.

The following graphic depicts DWR's financial management journey map that describes how the four (4) technology efforts of FMEP work together:







# 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, Eide Bailly, LLP. The Independent Auditors' Report on our current financial statements is presented in the Financial Section. The 2018 financial statements were audited by Vavrinek, Trine, Day & Co., LLP, who was acquired by Eide Bailly, LLP on July 22, 2019.

# 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, 2018. This was the third 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 Eide Bailly, LLP for their invaluable professional support in the preparation of the CAFR.

Respectfully submitted,

Ted Craddock SWP Deputy Director

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

Lori Lay Accounting Administrator II

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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, 2018

Christophen P. Monill

Executive Director/CEO

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# FINANCIAL SECTION

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**CPAs & BUSINESS ADVISORS** 

#### **Independent Auditor's 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, 2019, and the related notes to the financial statements, which collectively comprise the System's basic 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.

#### Auditor's 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.

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#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the System, as of June 30, 2019, and the respective 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.

#### **Adjustments to Prior Period Financial Statements**

The financial statements of the System as of June 30, 2018, were audited by other auditors whose report dated March 26, 2019, expressed an unmodified opinion on those financial statements. As discussed in Note 2 to the financial statements, the System has restated its 2018 financial statements during the current year to correct the balances of unrecorded construction in progress, amounts recoverable through future billings under the water supply contracts, liabilities due to contractors, deferred inflows, and net position. The other auditors reported on the 2018 financial statements before the restatement.

As part of our audit of the 2019 financial statements, we also audited the adjustments described in Note 2 that were applied to restate the 2018 financial statements. In our opinion, such adjustments are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to the 2018 financial statements of the System other than with respect to the adjustments and, accordingly, we do not express an opinion or any other form of assurance on the 2018 financial statements as a whole.

#### **Emphasis of Matter**

#### Reporting Entity

As disclosed in Note 1 to the financial statements, 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, 2019, and the changes in its financial positions and 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.

#### Correction of Errors

As disclosed in Note 2 to the financial statements, System recorded prior period adjustments to correct the balances of construction in progress, amounts recoverable through future billings under the water supply contracts, liabilities, deferred inflows, and net position. Our opinion is not modified with respect to this matter.

#### **Other Matters**

#### Prior-Period Financial Statements

The financial statements as of June 30, 2018, were audited by Vavrinek, Trine, Day & Co., who joined with Eide Bailly LLP as of July 22, 2019, and whose report dated March 26, 2019, expressed an unmodified opinion on those statements.

#### **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that 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 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 an opinion on the financial statements taken as a whole. The introductory section, calculation of the adequacy of debt service coverage for the Central Valley Project revenue bonds, and the statistical section is presented for purposes of additional analysis and is not a required part of the financial statements.

The calculation of the adequacy of debt service coverage for the Central Valley Project revenue bonds is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the 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 is fairly stated, in all material respects, in relation to the financial statements taken 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 April 28, 2020, 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.

Sacramento, California

April 28, 2020

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# 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, 2019 and 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 2019 and 2018, the System recorded an increase in total assets of \$810.3 million and \$1,231 million, respectively, on total operating revenues of \$1,150 million and \$1,207 million, respectively.
- Deferred inflows of resources for capital costs increased by \$264.7 million to an ending balance of \$1,104.2 million in fiscal 2019 compared to \$839.5 million in fiscal 2018. The increase is primarily due to net revenues collected for principal payments of previous costs incurred to construct Utility Plant in Service (UPIS) assets.
- Deferred inflows of resources for capital costs increased by \$202.3 million to an ending balance of \$839.5 million in fiscal 2018 compared to \$637.2 million in fiscal 2017. The increase was primarily due to net revenues collected for principal payments of previous costs incurred to construct Utility Plant in Service (UPIS) assets.
- On April 24, 2019, the System issued tax-exempt, fixed rate CVP Revenue Bond, Series BA, with a par amount of \$299.6 million and a premium of \$70.3 million to redeem \$346 million of commercial paper notes.
- 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 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.

In August 2018, the System received an approximately \$3.8 million FEMA disaster grant, included in other revenues, to reimburse the System for costs associated with the Oroville Dam Spillway Recovery and Restoration Project.

# **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 Statements of Net Position includes all the assets, liabilities, deferred outflows and inflows of resources, and net position. The Statements of Revenues, Expenses and Changes in Net Position reports all of the revenues and expenses incurred during the fiscal year presented. The Statements 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 45 - 51 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 53 - 104 of this report.

## **REQUIRED SUPPLEMENTARY INFORMATION (RSI) 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. RSI and Supplementary information can be found on pages 105 - 110 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.

#### Condensed Statements of Net Position

	June 30,						
	 2019	(/	2018 As restated)	(4	2017 As restated)	% Change 2019-2018	% Change 2018-2017
	(am	our	nts in thousar	nds)			
Assets:							
Other assets	\$ 2,868,819	\$	2,613,180	\$	2,029,853	9.8%	28.7%
Total utility plant	5,520,962		4,966,257		4,318,251	11.2%	15.0%
Total assets	 8,389,781		7,579,437		6,348,104	10.7%	19.4%
Total deferred outflows of resources	 296,613		401,026		282,685	-26.0%	41.9%
Total assets and deferred outflows of resources	\$ 8,686,394	\$	7,980,463	\$	6,630,789	8.8%	20.4%
Liabilities:							
Other liabilities	\$ 732,168	\$	639,296	\$	574,256	14.5%	11.3%
Noncurrent liabilities:	5,298,865		5,077,345		4,025,773	4.4%	26.1%
Total liabilities	 6,031,033		5,716,641		4,600,029	5.5%	24.3%
Total deferred inflows of resources	 1,489,012		1,069,784		787,863	39.2%	35.8%
Net position:							
Net investment in capital assets	783,286		942,618		748,439	-16.9%	25.9%
Restricted	383,063		251,420		494,458	52.4%	-49.2%
Total net position	 1,166,349	_	1,194,038		1,242,897	-2.3%	-3.9%
Total liabilities, deferred inflows of resources, and net position	\$ 8,686,394	\$	7,980,463	\$	6,630,789	8.8%	20.4%

\* Certain amounts have been restated or reclassified from amounts previously reported to conform with the current year presentation. See Note 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 \$554.7 million, primarily due to the construction of the Oroville Dam Spillway Recovery and Restoration Project. This increase was offset by an increase of \$714 million in debt relating to the issuance of Water System Revenue Bond, Series BA, to fund capital assets and increases in deferred inflows of resources related to OPEB due to assumption changes, and increases in capital costs relating to the timing difference between capital revenue recovered and the depreciation expense recognition. This resulted in an overall decrease in net investment in capital assets of \$159.3 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

	Fisca	l Year Ended Ju			
	2019	2018 (As restated)	2017 (As restated)	% Change 2019-2018	% Change 2018-2017
	(am	ounts in thousar	ıds)		
Operating revenues:					
Water supply	\$ 1,010,751	\$ 1,076,238	\$ 1,082,587	-6.1%	-0.6%
Power sales	96,308	88,148	85,089	9.3%	3.6%
Federal and State reimbursements	42,593	42,127	55,664	1.1%	-24.3%
Total operating revenues	1,149,652	1,206,513	1,223,340	-4.7%	-1.4%
Operating expenses:					
Operations and maintenance	645,191	555,163	544,925	16.2%	1.9%
Purchased power	290,908	342,115	339,993	-15.0%	0.6%
Depreciation and amortization	94,191	80,101	77,265	17.6%	3.7%
Operating expenses recovered, net	(151,926)	(64,454)	57,066	135.7%	-212.9%
Total operating expenses	878,364	912,925	1,019,249	-3.8%	-10.4%
Income from operations	271,288	293,588	204,091	-7.6%	43.9%
Nonoperating revenues/expenses:					
Capital revenues recovered (deferred), net	(334,870)	(294,864)	(130,147)	13.6%	126.6%
Interest expense	(116,481)	(105,429)	(105,768)	10.5%	-0.3%
Investment income (loss), net	22,482	15,353	9,012	46.4%	70.4%
Other revenues (expenses), net	129,892	42,493	22,812	205.7%	86.3%
Total nonoperating revenues/expenses	(298,977)	(342,447)	(204,091)	-12.7%	67.8%
Change in net position	(27,689)	(48,859)	-	-43.3%	-
Net position, beginning of year, as restated	1,194,038	1,242,897	1,205,428	-3.9%	3.1%
Net position, end of year	\$ 1,166,349	\$ 1,194,038	\$ 1,242,897	-2.3%	-3.9%

\* Certain amounts have been restated or reclassified from amounts previously reported to conform with the current year presentation. See Note 2.

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The System recognized a loss in fiscal 2019 of \$27.7 million compared to a loss of \$48.9 million in fiscal 2018. The components of the losses are shown in the table below:

Net Income/Loss							
	2019		2018				
		ds)					
Capital cost in excess of revenue	\$	(6,040)	\$	(18,408)			
Suspended costs		(6,777)		(18,590)			
Recreation minimum		(25,497)		(20,432)			
Recreation depreciation		(2,404)		(2,229)			
Bad debt		(13,025)		-			
Interest and other miscellaneous		26,054		10,800			
Net income/ (loss)	\$	(27,689)	\$	(48,859)			

# Revenues

# **OPERATING REVENUES**

The decrease of \$56.9 million in operating revenues for fiscal 2019 is attributable to a decrease of \$65.5 million in water supply revenue billings primarily due to decreased water deliveries. This decrease was offset by an increase in power sales revenue of \$8.1 million and an increase of \$500 thousand in federal reimbursements.

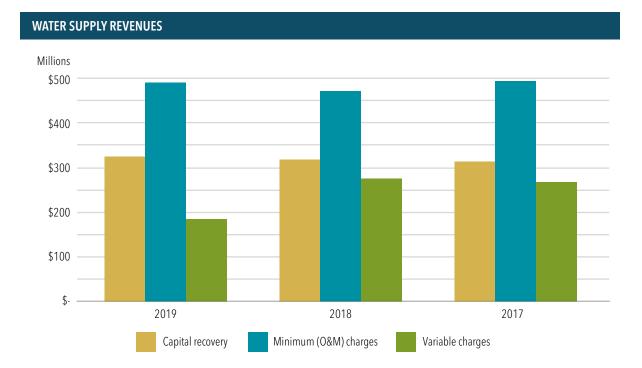
The decrease of \$16.8 million in operating revenues for fiscal 2018 is attributable to a decrease of \$13.5 million in federal and state reimbursements primarily due to funds depleted for capital cost recovery from Proposition 84 and Greenhouse Gas Reduction funds, and a decrease of \$6.3 million in 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.

## WATER SUPPLY REVENUE

The largest portion of revenues, approximately 87.92%, comes from Water Supply Revenue. In fiscal 2019, the System generated \$1,010.8 million in water supply revenue, compared to \$1,076.2 million in fiscal 2018, and \$1,082.6 million in fiscal 2017.

The following table shows a comparative breakdown of the components of water supply revenue for fiscal years 2019, 2018, and 2017:

## MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)



# Expenses

# **OPERATING EXPENSES**

Total operating expenses decreased by \$34.6 million for fiscal 2019 to a total of \$878.4 million. The decrease is primarily due to the timing difference between recovery and recognition of operating costs and decreased power purchases.

Total operating expenses decreased by \$106.3 million for fiscal 2018 to a total of \$913 million. The decrease is primarily due to the timing difference between recovery and recognition of operating costs, offset in part by increased employment costs.

# **OPERATIONS AND MAINTENANCE EXPENSES**

The total operations and maintenance expenses increase of \$90 million in fiscal 2019 was mostly attributed to the following factors: \$53 million increase in litigation cost related to the Oroville Dam Spillway; \$24 million increase in consultant and professional services, facilities security, and waste removal cost; and \$13 million increase in bad debt expense.

The increase in operations and maintenance expenses of \$10.2 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.

### **PURCHASED POWER**

In fiscal 2019, purchased power decreased by \$51.2 million to a total of \$291 million. This was mainly due to water deliveries decreased from 3.1 million acre-feet in fiscal 2018 to 2.4 million acre-feet in 2019, a decrease of 0.70 million acre-feet or 22.47%. The decrease in water deliveries resulted in decreased pumping demand.

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.

#### **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) increased by \$87.5 million in fiscal 2019. This is due mainly to the difference noted in the Operations and Maintenance expenses section.

In fiscal 2018, operating and maintenance expense recovered decreased by \$121.5 million. This was due mainly to the normal-course timing differences for prior year over-recoveries offset in part by \$30 million of increased employment 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 \$40 million in fiscal 2019. This is due primarily to the normal-course timing difference as described.

In fiscal 2018, capital revenues recovered increased by \$164.7 million. This increase was due primarily to the normalcourse compensation for prior year under-recoveries of \$88 million as well as an increased current year depreciation timing difference.

#### **INTEREST EXPENSE**

Interest expense for fiscal 2019 increased by \$11 million from \$105.4 million in fiscal 2018 to \$116.4 million in fiscal 2019. The \$11 million increase was attributable to the new issuances of Revenue Bonds Series AZ and BA, interest accrued for the SB 84 Loan, as well as the increase in interest from Commercial Paper borrowings.

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.

# 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 2019 was \$554.7 million (including \$28.4 million of capitalized interest) and for fiscal 2018 was \$648 million (including \$4.5 million of capitalized interest), an increase of 11.17% and 15.01%, 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)								
	2019			2018 s restated)	2017 (as restated)				
Nondepreciable Utility Plant	\$	2,379,198	\$	1,926,901	\$	1,608,527			
Depreciable Utility Plant		5,418,274		5,224,850		4,826,862			
Total Utility Plant		7,797,472		7,151,751		6,435,389			
Less Accumulated depreciation / amortization		(2,276,510)		(2,185,494)		(2,117,138)			
Utility Plant, Net	\$	5,520,962	\$	4,966,257	\$	4,318,251			

#### LONG-TERM DEBT

The System's total debt increased \$436.9 million or 12.3% during fiscal 2019. This increase was comprised of the issuance of approximately \$619.3 million in new debt, net of refundings, including premiums, offset by bond principal payments and amortization of premiums and discounts of \$182.4 million. The change in debt included the issuance of new bond Series AZ and BA with a par of \$514.9 million and a premium of \$104.5 million, the issuance of \$585.1 million of commercial paper notes, which was partially offset by a \$109.1 million in refunded bonds by Series AZ and \$475.8 million in refunded commercial paper notes by Series AZ and BA. The most significant increase in debt was due to the issuance of commercial paper notes, which were used to continue financing the cost related to the Oroville Dam Spillway Recovery and Restoration Project. During fiscal 2018, the System's total debt increased by \$302.8 million. This was comprised of new debt of \$504.4 million, net of refundings, and principal payments and amortization of premiums and discounts of \$262.5 million.

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

#### MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)

#### Long-Term Debt

	Balance (in thousands)							
	2019			2018	2017			
Revenue Bonds	\$	3,222,577	\$	2,869,007	\$	3,026,368		
General Obligation Bonds		28,090		54,065		88,300		
Commercial Paper		689,984		580,672		147,165		
SB 84 Loan		60,910		60,910		-		
Total		4,001,561		3,564,654		3,261,833		
Less current portion		(176,994)		(155,375)		(172,805)		
Long-term portion	\$	3,824,567	\$	3,409,279	\$	3,089,028		

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

# **Economic Factors**

During Public Health Emergency, COVID-19, the Department of Water Resources (DWR) continues operations and maintenance as an essential activity as defined in Governor Newsom's order. Following guidance from Governor Newsom and California Department of Public Health, DWR has made several changes in response to the dynamic situation. Such changes included developing continued operations plans to maintain its core functions, particularly water deliveries and maintenance of critical infrastructure and modifying staffing as needed to ensure coverage 24 hours a day, seven days a week, while also complying with guidance from Governor Newsom regarding social distancing and other measures to protect public health.

DWR continues to provide the State of California its core services of water delivery, flood protection, dam safety and infrastructure maintenance. California residents can be assured that DWR will continue to provide reliable, high quality water and that California's water treatment process removes and kill viruses, including COVID-19.

DWR finances a portion of its capital improvement program through the short-term tax-exempt securities market. The COVID-19 pandemic had significant effects on the financial markets. The liquidity pressures were particularly severe in the municipal market due primarily to its much narrower investor base. Beginning in early March 2020, the commercial paper market on which DWR relies for interim funding, experienced significantly higher funding costs. However, DWR was able to continue to place its outstanding commercial paper with traditional investors without needing to draw on the bank liquidity facilities supporting the commercial paper.

In late March, the Federal Reserve Bank and the U. S. Treasury took unprecedented actions and implemented programs to support the financial markets, including programs designed specifically to support the commercial paper and other short-term funding markets, including measures intended to support the municipal short-term markets. These government programs have to date been effective in restoring normal functioning to the commercial paper market and DWR's commercial paper funding rates have returned to normal, pre-COVID-19, levels.

However, the COVID-19 pandemic is unprecedented and its ongoing impact on the economy and the financial markets cannot be predicted. There is no certainty that DWR will be able to continue to place its commercial paper with investors at normal rates. DWR could experience significantly higher funding costs, be required to draw on its bank liquidity facilities and/or be unable to issue new commercial paper to fund planned capital expenditures. Further, severe disruptions could limit DWR's access to long-term financing that could otherwise provide a means for refinancing commercial paper or bank loans incurred to purchase commercial paper that could not be placed with public market investors.

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 2019, 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.

Increases or decreases in water allocations depend on water availability. Water deliveries decreased from 3.13 million acre-feet in fiscal 2018 to 2.43 million acre-feet in fiscal 2019, a decrease of 0.70 million acre-feet or 22.47%. The System experienced a dry winter in fiscal 2018, which contributed to decreased water deliveries. Water allocation began at 10% and gradually increased to 75% in June 2019 as numerous winter storms occurred during November 2018 through March 2019, which created a run-off into DWR's reservoirs. Lake Oroville reservoir was at 30% full capacity in January 2019 to near 100% full capacity by June 2019.

Northern California experienced a wet winter in fiscal 2019 and recorded the fifth largest snowpack measurement on record. With such high snowpack water content, the Department is hopeful that the high snowpack will continue to create run-off into DWR's reservoirs until late summer.

# **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.

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		(anoc		thousands,	
	June 30,				
		2019	(Δ	2018 .s restated)	
Assets					
Current assets:					
Cash and cash equivalents	\$	708,971	\$	731,382	
Receivables:	Ŷ	, ,	Ŷ	, 0 , 002	
Interest on investments		5,037		4,229	
Water supply and power billings (net)		147,624		97,025	
Due from federal and state governments (net)		207,380		53,636	
Due from others		7,664		115	
Inventories		4,893		5,437	
Total current assets		1,081,569		891,824	
Noncurrent assets:					
Restricted assets:					
Cash and cash equivalents restricted for plant replacements		37,779		37,408	
Cash and investments restricted for debt service		142,380		126,042	
Cash and cash equivalents on deposit with revenue bond trustee		34,354		33,913	
Total restricted assets		214,513		197,363	
Amounts recoverable through future billings under					
long-term water supply contracts:		4.044.70/		004.000	
Operations and maintenance expense		1,014,786		921,883	
Unamortized project costs		184,727		187,315	
Unbilled interest incurred on capital costs		267,071		308,742	
Total amounts recoverable through future billings		1,466,584		1,417,940	
Loans receivable from local water agencies		10,105		10,924	
Advances to other state funds		96,048		95,129	
Utility Plant:					
Nondepreciable utility plant		300,865		273,896	
Depreciable utility plant		5,418,274		5,224,850	
Less accumulated depreciation/amortization		(2,276,510)		(2,185,494)	
Net utility plant in service		3,442,629		3,313,252	
Construction work in progress		2,078,333		1,653,005	
Total utility plant		5,520,962		4,966,257	
Total noncurrent assets		7,308,212		6,687,613	
Total assets		8,389,781		7,579,437	
Deferred outflows of resources					
Deferral of loss on refunding		138,932		149,380	
Deferral of resources related to pensions		133,035		230,393	
Deferral of resources related to OPEB		24,646		230,373	
Total deferred outflows of resources		296,613		401,026	
				7,980,463	

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Statements of Net Position (continued)				thousand	
			une 30, 2018 (As restated)		
		2019			
Liabilities					
Current liabilities:					
Current maturities of bonds	\$	164,440	\$	155,375	
Accounts payable		172,753		185,119	
Accrued compensated absences		16,578		15,402	
Pollution remediation		10,358		8,557	
SB 84 Loan		12,554			
Accrued interest on long-term debt		15,329		10,685	
Due to other state funds		50,821		53,059	
Proceeds due to water contractors		289,335		211,099	
Total current liabilities		732,168		639,296	
Noncurrent liabilities:					
General obligation bonds, net of current portion		10,685		28,090	
Revenue bonds, net of current portion		3,075,542		2,739,607	
Commercial paper		689,984		580,672	
Net pension liability		527,333		630,912	
Net OPEB liability		771,286		912,912	
SB 84 Loan		48,356		60,910	
Claims liability		52,259			
Accrued compensated absences, net of current portion		25,703		26,926	
Pollution remediation, net of current portion		41,978		41,31 <i>°</i>	
Unearned revenue - State and Federal capital recovery		16,468		17,06 <i>°</i>	
Advances for plant replacements		39,271		38,944	
Total noncurrent liabilities		5,298,865		5,077,345	
Total liabilities		6,031,033		5,716,64	
Deferred inflows of resources					
Operations and maintenance expense		1,731		1,800	
Capital costs		1,104,215		839,529	
Power sales credit due to Water Contractors		111,636		133,250	
Deferral of resources related to pensions		40,444		13,472	
Deferral of resources related to OPEB		230,986		81,733	
Total deferred inflows of resources		1,489,012		1,069,784	
Total liabilities and deferred inflows of resources		7,520,045		6,786,425	
Net position:					
Net investment in capital assets		783,286		942,618	
Restricted for:					
Debt service and plant replacements		214,513		197,363	
SWP related activities		168,550		54,057	
Total net position		1,166,349		1,194,038	
Total liabilities, deferred inflows of resources, and net position	¢	8,686,394	\$	7,980,463	

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

(amounts in thousands)

	Fiscal Year Ended June 30,					
	2019	2018 (As restated)				
Operating revenues:						
Water supply	\$ 1,010,751	\$ 1,076,238				
Power sales	96,308	88,148				
Federal and State reimbursements	42,593	42,127				
Total operating revenues	1,149,652	1,206,513				
Operating expenses:						
Operations and maintenance	645,191	555,163				
Purchased power	290,908	342,115				
Depreciation and amortization	94,191	80,101				
Operating expenses recovered, net	(151,926)	(64,454)				
Total operating expenses	878,364	912,925				
Income from operations	271,288	293,588				
Nonoperating revenue (expenses):						
Capital revenues recovered (deferred), net	(334,870)	(294,864)				
Interest expense	(116,481)	(105,429)				
Investment income, net	22,482	15,353				
Other revenues (expenses), net	129,892	42,493				
Total nonoperating revenues (expenses)	(298,977)	(342,447)				
Change in net position	(27,689)	(48,859)				
Net position, beginning of year, as restated	1,194,038	1,242,897				
Net position, end of year	\$ 1,166,349	\$ 1,194,038				

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### Statements of Cash Flows

#### (amounts in thousands)

Cash flows from operating activities:20192018 (As restated)Receipts from customers\$ 1.029,225\$ 1.239,890Payments to suppliers(478,709)(409,403)Other receipts129,89242,493Net cash provided by operating activities:350,805498,025Proceeds from issuance of revenue obligationbonds including premium405,805-bonds including premium405,805Payments to advance refund bond-(39,760)-Principal payments on long-term debt(155,375)(172,805)Commercial paper notes issued585,075500,484Principal payments on commercial paper notes(475,763)(66,976)Interest payments on long-term debt(197,763)(586,626)Cash flows from investing activities:(378,559)(586,626)Cash received from investment earnings21,03414,160Proceeds of investing activities:21,03414,160Proceeds of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities:21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Sash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, beginning of year878,679942,746Sash and cash equivalents, beginning of year878,679942,746 <tr< th=""><th></th><th colspan="5">Fiscal Year Ended June 30,</th></tr<>		Fiscal Year Ended June 30,				
Receipts from customers\$1,092,325\$1,239,890Payments to employees for services(392,703)(374,955)Payments to suppliers(478,709)(409,403)Other receipts129,89242,493Net cash provided by operating activities:350,805498,025Cash flows from capital and related financing activities:7(39,760)Proceeds from issuance of revenue obligation5(155,375)(172,805)Donds including premium405,805-(39,760)Principal payments on long-term debt(155,375)(172,805)Commercial paper notes issued585,075500,484Principal payments on long-term debt(89,223)(77,462)Additions to utility plant and construction work in progress(649,078)(728,107)Net cash used by capital and related financing activities(378,559)(586,626)Cash flows from investment earnings21,03414,160Proceeds of investments matured252,418211,911Purchases of investments activities(2102,772)(202,547)Loan payments from local water agencies8191,010Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year5872,6245Amortization of bod premium/discount\$27,287\$50,505Amortization of bod premium/discount\$27,287\$50,505Amortization of bod premium/discount\$27,287\$50,505 </th <th></th> <th></th> <th>2019</th> <th>(4</th> <th></th>			2019	(4		
Payments to employees for services(392,703)(374,955)Payments to suppliers(478,709)(409,403)Other receipts129,89242,493Net cash provided by operating activities350,805498,025Cash flows from capital and related financing activities:Proceeds from issuance of revenue obligation50,805-bonds including premium405,805-Payments to advance refund bond-(39,760)Payments on long-term debt(155,375)(172,805)Commercial paper notes issued585,075500,484Principal payments on commercial paper notes(475,763)(66,976)Interest payments on long-term debt(89,223)(79,462)Additions to utility plant and construction work in progress(649,078)(728,107)Net cash used by capital and related financing activities(378,559)(586,626)Cash flows from investment earnings21,03414,160Proceeds of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities:21,69924,534Noncash capital and related financing activities:Are tirreesse (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, end of year\$ 872,624\$ 878,679Value tirreements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,08053	Cash flows from operating activities:					
Payments to suppliers(478,709)(409,403)Other receipts129,89242,493Net cash provided by operating activities350,805498,025Cash flows from capital and related financing activities:Proceeds from issuance of revenue obligation bonds including premium405,805-Payments to advance refund bond-(39,760)Principal payments on long-term debt(155,375)(50,484)Principal payments on commercial paper notes(475,763)(66,976)Interest payments on long-term debt(89,223)(79,462)Additions to utility plant and construction work in progress(649,078)(728,107)Net cash used by capital and related financing activities(378,559)(586,626)Cash flows from investment earnings21,03414,160Proceeds of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year\$ 872,624\$ 878,679Amortization of bond premium/discount\$ 27,287\$ 50,505Amortization of bond premium/disco	Receipts from customers	\$	1,092,325	\$	1,239,890	
Other receipts129,89242,493Net cash provided by operating activities350,805498,025Cash flows from capital and related financing activities:7000000000000000000000000000000000000	Payments to employees for services		(392,703)		(374,955)	
Net cash provided by operating activities350,805498,025Cash flows from capital and related financing activities:Proceeds from issuance of revenue obligation bonds including premium405,805.Payments to advance refund bond	Payments to suppliers		(478,709)		(409,403)	
Cash flows from capital and related financing activities:         Proceeds from issuance of revenue obligation         bonds including premium       405,805         Payments to advance refund bond       (39,760)         Principal payments on long-term debt       (155,375)         Commercial paper notes issued       585,075         South of the payments on commercial paper notes       (475,763)         Interest payments on long-term debt       (89,223)         Additions to utility plant and construction work in progress       (649,078)         Additions to utility plant and construction work in progress       (649,078)         Cash flows from investing activities:       (378,559)         Cash received from investment earnings       21,034       14,160         Proceeds of investments       (252,772)       (202,547)         Loan payments from local water agencies       819       1,010         Net cash provided by investing activities       21,699       24,534         Net increase (decrease) in cash and cash equivalents       (6,055)       (64,067)         Cash and cash equivalents, beginning of year       878,679       942,746         Cash and cash equivalents, end of year       \$872,624       \$878,679         Noncash capital and related financing activities:       (0,055)       (64,067)	Other receipts		129,892		42,493	
Proceeds from issuance of revenue obligationbonds including premium405,805Payments to advance refund bond(39,760)Principal payments on long-term debt(155,375)Commercial paper notes issued585,075Sommercial paper notes issued585,075Ommercial payments on long-term debt(89,223)Interest payments on long-term debt(89,223)Additions to utility plant and construction work in progress(649,078)Additions to utility plant and construction work in progress(649,078)Cash received from investing activities:(378,559)Cash received from investment earnings21,034Proceeds of investments matured252,618Purchases of investments(252,772)Loan payments from local water agencies819Net cash provided by investing activities21,699Zash and cash equivalents, beginning of year878,679Cash and cash equivalents, end of year\$ 872,287Sonotast capital and related financing activities:378,679Noncash capital and related financing activities:378,679Noncash capital and related financing activities:872,624Amortization of bond premium/discount\$ 27,287Amortization of deferred loss on refunding(10,302)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080Sonotas for 2019 and 2018, respectively109,080531,255	Net cash provided by operating activities		350,805		498,025	
bonds including premium405,805Payments to advance refund bond(39,760)Principal payments on long-term debt(155,375)Commercial paper notes issued585,075Sommercial paper notes issued585,075Principal payments on commercial paper notes(475,763)Interest payments on long-term debt(89,223)Additions to utility plant and construction work in progress(649,078)Net cash used by capital and related financing activities(378,559)Cash flows from investing activities:(252,772)Cash received from investment earnings21,034Proceeds of investments(252,772)Loan payments from local water agencies8191,010Net cash provided by investing activitiesCash and cash equivalents, end of year\$ 878,679Payments form of bond premium/discount\$ 27,287Sonda cash equivalents, end of year\$ 878,679Amortization of bond premium/discount\$ 27,287Sonda for 2019 and 2018, respectively109,080Sanda for 2019 and 2018, respectively109,080Sanda for 2019 and 2018, respectively109,080	Cash flows from capital and related financing activities:					
Payments to advance refund bond	Proceeds from issuance of revenue obligation					
Principal payments on long-term debt(155,375)(172,805)Commercial paper notes issued585,075500,484Principal payments on commercial paper notes(475,763)(66,976)Interest payments on long-term debt(89,223)(79,462)Additions to utility plant and construction work in progress(649,078)(728,107)Net cash used by capital and related financing activities(378,559)(586,626)Cash flows from investing activities:(21,034)14,160Proceeds of investment earnings21,03414,160Proceeds of investments matured252,618211,911Purchases of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities(6,055)(64,067)Cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:\$ 27,287\$ 50,505Amortization of bond premium/discount\$ 27,287\$ 50,505Amortization of deferred loss on refunding(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080531,255Description109,080531,2554 12,050	bonds including premium		405,805		-	
Commercial paper notes issued585,075500,484Principal payments on commercial paper notes(475,763)(66,976)Interest payments on long-term debt(89,223)(79,462)Additions to utility plant and construction work in progress(649,078)(728,107)Net cash used by capital and related financing activities(378,559)(586,626)Cash flows from investing activities:Cash received from investment earnings21,03414,160Proceeds of investments matured252,618211,911Purchases of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:\$ 27,287\$ 50,505Amortization of bond premium/discount\$ 27,287\$ 50,505Amortization of deferred loss on refunding(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080531,255Output to find premium/discount\$ 21,219\$ 21,254\$ 21,254	Payments to advance refund bond		-		(39,760)	
Principal payments on commercial paper notes(475,763)(66,976)Interest payments on long-term debt(89,223)(79,462)Additions to utility plant and construction work in progress(649,078)(728,107)Net cash used by capital and related financing activities(378,559)(586,626)Cash flows from investing activities:Cash received from investment earnings21,03414,160Proceeds of investments matured252,618211,911Purchases of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:\$ 27,287\$ 50,505Amortization of bond premium/discount\$ 27,287\$ 50,505Amortization of deferred loss on refunding(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080531,255Output109,080531,2550109,045531,255	Principal payments on long-term debt		(155,375)		(172,805)	
Interest payments on long-term debt(89,223)(79,462)Additions to utility plant and construction work in progress(649,078)(728,107)Net cash used by capital and related financing activities(378,559)(586,626)Cash flows from investing activities:21,03414,160Cash received from investment earnings21,03414,160Proceeds of investments matured252,618211,911Purchases of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue109,080531,255Bonds for 2019 and 2018, respectively109,080531,2556	Commercial paper notes issued		585,075		500,484	
Additions to utility plant and construction work in progress(649,078)(728,107)Net cash used by capital and related financing activities(378,559)(586,626) <b>Cash flows from investing activities:</b> (252,618)211,911Cash received from investment earnings21,03414,160Proceeds of investments matured252,618211,911Purchases of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080531,255Quite 109,080531,255109,045109,080531,255	Principal payments on commercial paper notes		(475,763)		(66,976)	
Net cash used by capital and related financing activities(378,559)(586,626)Cash flows from investing activities: Cash received from investment earnings21,03414,160Proceeds of investments matured252,618211,911Purchases of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080531,255Cast of 2019 and 2018, respectively109,080531,255	Interest payments on long-term debt		(89,223)		(79,462)	
Cash flows from investing activities:Cash received from investment earnings21,03414,160Proceeds of investments matured252,618211,911Purchases of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080531,255\$ 121,012109,080531,255	Additions to utility plant and construction work in progress		(649,078)		(728,107)	
Cash received from investment earnings21,03414,160Proceeds of investments matured252,618211,911Purchases of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue109,080531,255Bonds for 2019 and 2018, respectively109,080531,255	Net cash used by capital and related financing activities		(378,559)		(586,626)	
Proceeds of investments matured252,618211,911Purchases of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:\$ 27,287\$ 50,505Amortization of bond premium/discount\$ 27,287\$ 50,505Amortization of deferred loss on refunding(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue109,080531,255Donds for 2019 and 2018, respectively109,080531,255	Cash flows from investing activities:					
Purchases of investments(252,772)(202,547)Loan payments from local water agencies8191,010Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:\$ 27,287\$ 50,505Amortization of bond premium/discount\$ 27,287\$ 50,505Amortization of deferred loss on refunding(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080531,255A 101,025\$ 101,025\$ 101,025\$ 101,025	Cash received from investment earnings		21,034		14,160	
Loan payments from local water agencies8191,010Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:10,002(10,151)Amortization of bond premium/discount\$ 27,287\$ 50,505Amortization of deferred loss on refunding(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080531,255Image: Content of the series	Proceeds of investments matured		252,618		211,911	
Net cash provided by investing activities21,69924,534Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:4 878,679942,746Amortization of bond premium/discount\$ 27,287\$ 50,505Amortization of deferred loss on refunding(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080531,255Amortization101,0154 101,015101,005	Purchases of investments		(252,772)		(202,547)	
Net increase (decrease) in cash and cash equivalents(6,055)(64,067)Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:\$ 27,287\$ 50,505Amortization of bond premium/discount\$ 27,287\$ 50,505Amortization of deferred loss on refunding(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080531,255Amortization101,0151\$ 101,0151\$ 101,005\$ 101,005	Loan payments from local water agencies		819		1,010	
Cash and cash equivalents, beginning of year878,679942,746Cash and cash equivalents, end of year\$ 872,624\$ 878,679Noncash capital and related financing activities:\$ 27,287\$ 50,505Amortization of bond premium/discount\$ 27,287\$ 50,505Amortization of deferred loss on refunding(10,302)(10,151)Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively109,080531,255Amortization of contract of the second sec	Net cash provided by investing activities		21,699		24,534	
Cash and cash equivalents, end of year       \$ 872,624       \$ 878,679         Noncash capital and related financing activities:       \$ 27,287       \$ 50,505         Amortization of bond premium/discount       \$ 27,287       \$ 50,505         Amortization of deferred loss on refunding       (10,302)       (10,151)         Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue       109,080       531,255         Amortization of 2019 and 2018, respectively       101,0151       101,0151	Net increase (decrease) in cash and cash equivalents		(6,055)		(64,067)	
Noncash capital and related financing activities:         Amortization of bond premium/discount       \$ 27,287         Amortization of deferred loss on refunding       (10,302)         Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue         Bonds for 2019 and 2018, respectively       109,080         531,255	Cash and cash equivalents, beginning of year		878,679		942,746	
Amortization of bond premium/discount       \$ 27,287       \$ 50,505         Amortization of deferred loss on refunding       (10,302)       (10,151)         Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue       109,080       531,255         Dends for 2019 and 2018, respectively       101,015       101,015       101,015		\$	872,624	\$	878,679	
Amortization of deferred loss on refunding       (10,302)       (10,151)         Principal retirements of long-term debt on proceeds received from       issuance of Series AZ and Series AX & AY Water System Revenue         Bonds for 2019 and 2018, respectively       109,080       531,255         t       101,015	Noncash capital and related financing activities:					
Amortization of deferred loss on refunding       (10,302)       (10,151)         Principal retirements of long-term debt on proceeds received from issuance of Series AZ and Series AX & AY Water System Revenue       109,080       531,255         Bonds for 2019 and 2018, respectively       101,015       101,015       101,015	Amortization of bond premium/discount	\$	27,287	\$	50,505	
issuance of Series AZ and Series AX & AY Water System Revenue Bonds for 2019 and 2018, respectively 109,080 531,255	Amortization of deferred loss on refunding		(10,302)		(10,151)	
Bonds for 2019 and 2018, respectively         109,080         531,255	Principal retirements of long-term debt on proceeds received from					
	issuance of Series AZ and Series AX & AY Water System Revenue					
Noncash capital and related financing activities: \$ 126,065 \$ 571,609	Bonds for 2019 and 2018, respectively		109,080		531,255	
	Noncash capital and related financing activities:	\$	126,065	\$	571,609	

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# Statements of Cash Flows (continued)

# (amounts in thousands)

	Fiscal Year Ended June 30,				
		2019	2018 (As restated)		
Reconciliation to the statement of net position:					
Cash and cash equivalents	\$	708,971	\$	731,382	
Restricted assets:					
Cash and cash equivalents restricted for plant replacements		37,779		37,408	
Cash and cash equivalents restricted for debt service					
(net of \$50,860 and \$50,066 of U.S. Agency securities					
for 2019 and 2018, respectively)		91,520		75,976	
Cash and cash equivalents on deposit with revenue bond trustee		34,354		33,913	
Cash and cash equivalents	\$	872,624	\$	878,679	
		2019	(A	2018 s restated)	
Reconciliation of income from operations to net cash provided by operating activities:					
Income from operations	\$	271,288	\$	293,588	
Adjustment to reconcile income from operations to net cash provided by operating activities					
Depreciation expense		94,191		80,101	
Other receipts		129,892		42,493	
Other non current liabilities		72,646		218,888	
(Increase) decrease in deferred charges and credits, net		18,369		(866,590)	
Changes in assets and liabilities:					
(Increase) decrease in receivables		(45,123)		9,535	
(Increase) decrease in inventories		545		(427)	
Increase in due from federal government		(166,769)		(18,383)	
Increase in accounts payable, accrued vacation, and					
pollution remediation		41,395		61,652	
Increase (decrease) in pension & OPEB		(141,626)		650,522	
Decrease in due to other state funds		(2,238)		(14,233)	
Increase in proceeds due to Water Contractors		78,235		40,879	
Total adjustments		79,517		204,437	
Net cash provided by operating activities	\$	350,805	\$	498,025	

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# 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, approximately 69% of its population and 8% of the United States' entire population, including Puerto Rico.

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 30 - 50 years
Power plants Pumping plants	30 - 30 years 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 non-depreciable 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 173 days as of June 30, 2019 and 193 days as of June 30, 2018. The total amount of deposits in SMIF was \$43.2 billion as of June 30, 2019 and \$36.4 billion as of June 30, 2018. 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 it 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, 2019 are of a similar nature as those held at June 30, 2018.

# **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, and to fund the Joint Operations Center.

### 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, 2019 and 2018 were as follows:

Inventories				
	:	2019	:	2018
Operating supplies	\$	4,608	\$	5,080
Fuel		285		357
Total	\$	4,893	\$	5,437

# 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, 2019 and 2018.

### **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 \$138.9 million as of June 30, 2019 and \$149.3 million as of June 30, 2018. The \$10.4 million decrease is due to the scheduled annual amortization expense of \$10.3 million, and \$143 thousand unamortized gain resulting from the current year refunding of Series AZ.

The System's allocated share of the deferred outflows of resources related to pensions was \$133 million and \$230.4 million as of June 30, 2019 and 2018, respectively. See Note 8 for additional information.

The System's allocated share of the deferred outflows of resources related to OPEB was \$24.6 million and \$21.3 million as of June 30, 2019 and 2018, respectively. 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 \$1.7 million and \$1.8 million in deferred inflows of operations and maintenance expenses as of June 30, 2019 and 2018, 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 \$1,104.2 million and \$839.5 million in deferred inflows of capital costs as of June 30, 2019 and 2018, 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 \$21.6 million to an ending balance of \$111.6 million in fiscal 2019 compared to \$133.2 million in fiscal 2018.

The System's allocated share of the deferred inflows of resources related to pensions was \$40.4 million and \$13.5 million as of June 30, 2019 and 2018, respectively. See Note 8 for additional information.

The System's allocated share of the deferred inflows of resources related to OPEB was \$231 million and \$81.7 million as of June 30, 2019 and 2018, respectively. 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 \$783.3 million and \$942.6 million at June 30, 2019 and 2018, respectively.

The restricted component of net position is for debt service and plant replacements, 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 plant replacements represents reserves held by the System for future replacement of certain System's asset. 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 \$383.1 million and \$251.4 million at June 30, 2019 and 2018, respectively.

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#### 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, 2019 and 2018. 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 \$58.9 million and \$56.3 million for the years ended June 30, 2019 and 2018, respectively, 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 for both fiscal years 2019 and 2018.

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 POSTEMPLOYMENT 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:

- 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.

#### RESTATEMENT

Certain amounts presented in the prior years have been restated in order to conform to the current year's presentation.

The System determined it had overcharged certain capital billings to the State Water Contractors from the years 2001 to 2018 and has accrued the refund of such overcharges.

The System has capitalized costs related to the California WaterFix. Such costs were previously expensed and reported as deferred inflows of resources in operations and maintenance expense.

In 2006, the System made an accounting change to defer all net income/(loss) as a result of an interpretation of the language in the Monterey Amendment. It has since been determined that the System should be recognizing net income/(loss) as a result of the return on the initial State's Equity contributions less any costs not recovered from third parties.

Accordingly, the System calculated its operating deferrals, capitalization of assets, and the recognition of net income/ (loss), and has made prior period adjustments and reclassifications as follows:

#### NOTES TO FINANCIAL STATEMENTS (in thousands)

# Prior Period Adjustments

,							
Statements of Net Position	Previously Reported at June 30, 2017	Adjustments	June 30, 2017 (After Adjustments)	Previously Reported at June 30, 2018	Adjustments Rolled- Forward	2018 Adjustments	June 30, 2018 (After Adjustments)
Amounts recoverable through future billings under the water supply contracts:							
Operations and maintenance expense	\$ 202,725	\$ 28,434	\$ 231,159	\$ 956,860	\$ 28,434	\$ (63,411)	\$ 921,883
Capital credit due from water contractors	348,845	(348,845)	-	372,608	(348,845)	(23,763)	-
Unamortized project costs	318,574	(126,824)	191,750	220,458	(126,824)	93,681	187,315
Total amounts to be recovered through future billings	870,144	(447,235)	422,909	1,549,926	(447,235)	6,507	1,109,198
Utility plant:							
Construction work in progress	1,095,997	244,589	1,340,586	1,396,750	244,589	11,666	1,653,005
Current liabilities:							
Proceeds due to water contractors	(95,350)	(74,871)	(170,221)	(118,940)	(74,871)	(17,288)	(211,099)
Deferred inflows of resources:							
Capital costs	(952,245)	314,986	(637,259)	(1,104,772)	314,986	(49,743)	(839,529)
Net position:							
Net investment in capital assets Restricted for:	(664,533)	(83,906)	(748,439)	(826,871)	(83,906)	(31,841)	(942,618)
Debt service and plant replacements	(347,006)	46,437	(300,569)	(181,194)	46,437	80,700	(54,057)
SWP related activities	(193,889)	-	(193,889)	(197,363)	-	-	(197,363)

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# Prior Period Adjustments

,								
Statements of Revenues, Expenses, and Changes in Net Position	Re	Previously Reported at June 30, 2018		Reported at		djustments	June 30, 20 <sup>-</sup> (After ts Adjustment	
Operating expenses								
Operations and maintenance	\$	566,620	\$	(11,457)	\$	555,163		
Operating expenses recovered, net		(88,572)		24,118		(64,454)		
Nonoperating revenue (expenses)								
Capital revenues recovered (deferred), net		(275,746)		(19,118)		(294,864)		
Other revenues (expenses), net		59,573		(17,080)		42,493		
Net position, beginning of year		1,205,428		37,469		1,242,897		

#### **COMPLIANCE AND ACCOUNTABILITY**

Per the System's continuing disclosure certificates and continuing disclosure agreement, the System has an obligation to meet specific continuing disclosures. The System's annual report and notices of material events must be filed by the System with the Municipal Securities Rulemaking Board (the MSRB) within 270 days after the System's fiscal year end. The System had filed the annual report for fiscal 2019 on the date hereof, but the annual report did not include financial statements as required per the continuing disclosure certificates and continuing disclosure agreement. The System will file its 2019 financial statements promptly on the MSRB website upon its completion.

# 3. Interests in Jointly Owned Facilities

At June 30, 2019 and 2018, the System owned the following undivided interests in jointly- owned facilities that are recorded in UPIS:

Interests in Joint-Use Facilities										
			System's Portion Based on % Owned							
	Joint Party	% Owned by System	Utility Plant/C Work in F		Accum De	preciation				
			<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>				
San Luis Joint-Use Facilities	USBR	55%	\$ 298,126	\$ 278,031	\$ 64,782	\$ 57,531				
SWP Hydropower Facilities License	LADWP	50%	\$ 4,696	\$ 2,718	\$-	\$-				

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 2019 is presented below:

Utility Plant June 30, 2019 Transfers Transfers Beginning and Ending and Balance Additions Deletions Balance (As restated) Nondepreciable Utility Plant: Land \$ 162,457 \$ 26,508 \$ \$ 188,965 Construction work in progress (CWIP) 1,653,005 611,125 (185,797)2,078,333 Land use rights 12,458 2 12,460 Other intangible assets 98,981 3,934 (3,475) 99,440 Total nondepreciable utility plant 1,926,901 641,569 (189,272) 2,379,198 Depreciable Utility Plant: Aqueducts 2,183,839 646 (1, 822)2.182.663 Dams & reservoirs 817,041 36 1,822 818,899 523,529 127,201 Power plants 650,730 Pumping plants 1,018,627 6,981 1,025,608 Environmental preservation and mitigation 67,797 67,797 Fish protection 35,544 35,544 Facilities 301,157 3,639 304,796 Equipment and other depreciable assets 75,214 10,662 (3,178) 82,698 27,206 27,349 Computer software 143 Land use rights 272 272 Other intangible assets 12,005 12,005 209,913 General 162,619 47,294 Total depreciable utility plant 5,224,850 196,602 (3, 178)5,418,274 Less: accumulated depreciation and amortization (24,986) Aqueducts (640,883) (665,869) Dams & reservoirs (389,695) (10,182) (399,877) Power plants (317,132) (11,913) (329,045) (612,498) (15,358) Pumping plants (627,856) Environmental preservation and mitigation (37,746) (1,366) (39,112) Fish protection (31, 275)(729)(32,004)Facilities (39,296) (10,031) (49,327) Equipment and other depreciable assets (59,731)(7,216) 3,175 (63,772)Computer software (25,177) (607) (25,784) Land use rights (272)(272)Other intangible assets (6,008) (1, 199)(7,207) General (25,781) (10,604) (36,385)

3,175 Total accumulated depreciation and amortization (2,185,494) (94,191) (2,276,510) Net depreciable plant 3,039,356 102,411 (3) 3,141,764 Total Utility Plant - net 4,966,257 \$ 743,980 \$ (189,275) \$ \$ 5,520,962

For the years ended June 30, 2019 and 2018 | 63

Utility Plant June 30, 2018 Beginning Transfers Transfers Ending Balance and and Balance (As restated) Additions Deletions (As restated) Nondepreciable Utility Plant: Land 156,934 5,523 \$ 162,457 \$ \$ \$ Construction work in progress (CWIP) 1,340,586 717,621 (405,202) 1,653,005 691 Land use rights 11,767 12,458 99,240 98,981 Other intangible assets (259)Total nondepreciable utility plant 1,608,527 723,835 (405,461) 1,926,901 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 1.018.627 Pumping plants 850,475 168,152 Environmental preservation and mitigation 67,797 67,797 35,544 35,544 Fish protection Facilities 298,295 2,862 301,157 Equipment and other depreciable assets 82,526 4,451 (11,763)75,214 27,206 Computer software 27,108 98 Land use rights 272 272 Other intangible assets 12,005 12,005 General 119,562 43,057 162,619 4,826,862 409,751 (11,763)5,224,850 Total depreciable utility plant Less: accumulated depreciation and amortization Aqueducts (616,435) (24, 448)(640,883) Dams & reservoirs (380,536) (9,159) (389,695) (317,132) Power plants (306,011) (11, 121)Pumping plants (600,979) (11,519) (612,498) Environmental preservation and mitigation (36,380) (1,366) (37,746) Fish protection (31,275) (30,545) (730) Facilities (29,418) (9,878) (39,296) Equipment and other depreciable assets (65, 537)(5, 939)11,745 (59,731)Computer software (643) (25, 177)(24,534) Land use rights (272) (272) Other intangible assets (4,806) (1,202) (6,008) (25,781)General (21,685) (4,096) 11,745 Total accumulated depreciation and amortization (2,117,138) (80,101) (2,185,494) Net depreciable plant 2,709,724 329,650 (18) 3,039,356 Total Utility Plant - net 1,053,485 (405,479) 4,318,251 \$ \$ \$ 4,966,257 \$

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

# 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, 2019 of \$838.3 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, 2019:

					Fair Value Measurement		
	% of Total	Credit Rating (S&P)	Under 30 Days	31-180 Days	181-365 Days	6/30/2019	Using Quoted Prices in Active Markets for Identical Assets (Level 1)
Investments by fair value level:							
Federal Home Loan Bank	6%	AA+	\$	\$ 50,860	\$ -	\$ 50,860	\$ 50,860
Total investment by fair value level			\$	\$ 50,860	\$	\$ 50,860	\$ 50,860
Investments not subject to fair value level:							
Surplus Money Investment Fund	90%	Not rated	-	-	838,270	838,270	
Cash and Investments held outside State Treasury:							
Money Market Funds	4%	AAA	34,354	-	-	34,354	
Total cash and investments			\$ 34,354	\$ 50,860	\$ 838,270	\$ 923,484	

#### Cash and Investments at June 30, 2019

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

				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:							
U.S. 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	

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, 2019 and 2018, the weighted average maturity of the investments contained in SMIF is approximately 173 days and 193 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, 2019 and 2018, the System had investments contained in SMIF totaling 91% for both fiscal years. The System's PMIA investments totaled \$838,270 and \$844,766 for the fiscal years ended June 30, 2019 and 2018, respectively. Investments outside the State's Centralized Treasury System totaled \$85,213 and \$83,979 for the fiscal years ended June 30, 2019 and 2018, respectively.

Interest on deposits in PMIA varies with the rate of return of the underlying portfolio and averaged 2.266%, and 1.376% for the years ended June 30, 2019 and 2018, respectively. For the years ended June 30, 2019 and 2018, interest earned on the deposits with PMIA approximated \$18.8 million and \$12.1 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. Federal Agency Securities of \$50.9 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, 2019 and 2018:

Long-Term Debt								
		Revenu	e Bonds		General Obligation Bonds	Commercial Paper	SB 84 Loan	Total Long Term Debt
	Par Amount	Unamortized Unamortized Total Revenue Discount Premium Bonds Pa			Par Amount Par Amount		Loan Amount	
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
Additions	514,885	-	104,452	619,337	-	585,075	-	1,204,412
Retirements	(109,080)	-	(313)	(109,393)	-	(475,763)	-	(585,156)
Amortization	-	1	(26,975)	(26,974)	-	-	-	(26,974)
Payments	(129,400)			(129,400)	(25,975)			(155,375)
Balance at June 30, 2019	2,784,265	(5)	438,317	3,222,577	28,090	689,984	60,910	4,001,561
Less current portion	(147,035)			(147,035)	(17,405)		(12,554)	(176,994)
Total Long-Term Debt	\$ 2,637,230	\$ (5)	\$ 438,317	\$ 3,075,542	\$ 10,685	\$ 689,984	\$ 48,356	\$ 3,824,567

#### **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, 2019, the amount of the revenues pledged to repay the Burns-Porter Act SWRDS GO Bonds debt service is \$28.1 million with payments through 2025. Principal and interest paid for the current year was \$28.4 million and Burns-Porter Act water supply operating revenues were \$764.4 million. As of June 30, 2018, the amount of the revenues pledged to repay the Burns-Porter Act SWRDS GO Bonds debt service was \$58.5 million. Principal and interest paid for 2018 was \$38 million and Burns-Porter Act SWRDS water supply operating revenues were \$840.7 million.

SWRDS GO Bonds of \$168 million are authorized but un-issued as of June 30, 2019 and 2018, and may only be used for additional facilities, meeting certain requirements of the Burns-Porter Act.

Outstanding SWRDS GO Bonds include Series N 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, 2019:

#### **General Obligation Bonds**

				 Amounts Ou		utstanding			
Fiscal Year of Issue	Series	Fixed Rates	Fiscal Year of Final Maturity	 2019		2018			
1969	L	4.5%	2019	\$ -	\$	4,500			
1969	Μ	4.0%	2019	-		4,500			
1970	Ν	5.0%	2020	4,500		8,900			
1970	Р	5.0%	2020	4,500		8,900			
1971	Q	4.8%	2021	8,900		13,200			
1971	R	4.8%	2021	4,450		6,600			
1972	S	5.3%	2022	5,280		6,920			
1994	Х	4.8%	2024	250		300			
1995	Y	7.0-7.1%	2025	 210		245			
Total General Ob	ligation bond d	ebt outstanding at	par	28,090		54,065			
Less current port	ion			 (17,405)		(25,975)			
Total Long-term (	General Obligat	ion bond debt outs	tanding	\$ 10,685	\$	28,090			

#### **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, 2019, the amount of the revenues pledged to repay the Water System Revenue Bonds debt service is \$3,838.4 million with payments through fiscal 2036. Principal and interest paid for the current year was \$242.5 million and CVP water supply operating revenues were \$246.3 million. As of June 30, 2018, the amount of the revenues pledged to repay the Water System Revenue Bonds debt service were \$3,452.2 million with payments through 2036. Principal and interest paid for the previous year was \$240.9 million and CVP water supply operating revenues were \$235.5 million.

The System's outstanding Water System Revenue Bonds contain a provision that in an event of default, and if after given a period of 60 days written notice by the Trustee, and the event of default continues, then the Trustee or the bondholders with at least 25 percent in the principal amount of outstanding Bonds are entitled to declare the outstanding amounts due immediately.

On April 24, 2019, the System issued tax-exempt, fixed-rate CVP Water System Revenue Bond, Series BA, with a par amount of \$299.6 million and a premium of \$70.3 million. This was achieved through a competitive sale to redeem

\$346 million of outstanding commercial paper notes. Bond proceeds were also used to pay the costs of issuance and fund both capitalized interest and the reserve account. The final maturity of the Series BA bonds will be 2035.

On October 18, 2018, the System issued tax-exempt, fixed rate CVP Water System 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 outstanding commercial paper notes and to current refund Series AF and AY. The System achieved an economic gain of \$2.5 million, representing 2.26% savings of the refunded bonds. The final maturity of the Series AZ bonds will be 2035.

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.

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, 2019:

#### NOTES TO FINANCIAL STATEMENTS (in thousands)

#### CVP Revenue Bonds

					 Amounts Ou	tstanding
Fiscal Year of Issue	Series	Fixed Rates	Fiscal Year of Final Maturity	Fiscal Year of First Call Date	2019	2018
Devil Canyon-Cast	taic Facilitie	s:				
1973	A&B	5.3%	2023	1983	\$ 32,045	38,955
CVP Water System	1:					
1999	V	6.3%	2025	None	18,050	18,050
2008	AE	3.7-5.0%	2019	2018	-	5,700
2009	AF	4.0-5.0%	2021	2019	-	13,355
2010	AG	4.0%	2020	None	400	785
2011	AH	4.5-5.0%	2023	2021	15,600	18,385
2012	Al	5.0%	2026	2022	32,625	45,590
2012	AJ	4.0-5.0%	2030	2022	62,270	79,885
2012	AK	4.0-5.0%	2030	2022	8,815	9,745
2013	AL	5.0%	2030	2023	51,265	56,605
2013	AM	5.0%	2026	2023	124,570	134,235
2013	AN	5.0%	2030	2023	12,895	16,535
2013	AP	3.0-4.0%	2036	2023	12,700	14,265
2013	AQ	4.0-5.0%	2036	2023	42,580	44,510
2014	AR	4.0-5.0%	2036	2024	78,870	84,725
2015	AS	4.0-5.0%	2033	2025	627,380	641,860
2015	AT	Variable	2036	2022	149,245	149,245
2016	AU	Variable	2036	2020	109,275	109,275
2016	AV	4.0-5.0%	2036	2026	102,685	106,530
2017	AW	4.0-5.0%	2036	2027	424,975	428,130
2018	AX	5.0%	2036	2028	326,190	350,670
2018	AY	2.1-3.1%	2030	2018	36,945	140,825
2019	AZ	3.0-5.0%	2036	2029	215,295	
2019	BA	5.0%	2036	2029	 299,590	-
Total CVP Water S	ystem Reve	nue Bonds			 2,752,220	2,468,905
Total revenue bo	nd debt ou	tstanding at pa	ar		2,784,265	2,507,860
Unamortized bond	d issuance p	oremiums			438,317	361,153
Unamortized bond	d issuance o	discounts			(5)	(6)
Less current portic	on				 (147,035)	(129,400)
Total long-term b	ond debt o		\$ 3,075,542	\$ 2,739,607		

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#### FUTURE DEBT SERVICE REQUIREMENTS

Future principal and interest payment requirements on the bonds are as follows at June 30, 2019:

Future Debt Service Requirements												
	Revenue Bonds						Gener	All Bonds				
Year	F	Principal	Interest*		Total	F	Principal	Interest		Total		Total
2020	\$	147,035	\$ 127,52	2 \$	274,557	\$	17,405	\$ 1,386	\$	18,791	\$	293,348
2021		167,775	119,40	5	287,180		8,595	527	,	9,122		296,302
2022		171,645	111,29	7	282,942		1,885	109		1,994		284,936
2023		179,225	102,66	2	281,887		85	10		95		281,982
2024		167,315	93,42	6	260,741		85	5		90		260,831
2025-2029		865,580	342,66	3	1,208,243		35	1		36		1,208,279
2030-2034		762,025	144,12	4	906,149		-	-		-		906,149
2035-2036		323,665	13,04	2	336,707		-			-		336,707
	\$	2,784,265	\$ 1,054,14	1 \$	3,838,406	\$	28,090	\$ 2,038	\$	30,128	\$	3,868,534

\*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. The variable rate for the bonds as of June 30, 2019 was 2.27% for Series AT and 2.12% for Series AU.

#### SB 84 LOAN

On July 10, 2017, the California Senate Bill 84 was enacted, 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 no payments were made during fiscal year 2019. Future principal and interest payment requirements on the loan are as follows as of June 30, 2019.

uture Debt Service Requirements											
	SB 84 Loan										
Year	Principal	Interest	Total								
2020	\$ 12,554	\$ 3,517	\$ 16,071								
2021	9,486	1,783	11,269								
2022	9,832	1,437	11,269								
2023	10,232	1,037	11,269								
2024	10,637	632	11,269								
2025	8,169	984	9,153								
	\$ 60,910	\$ 9,390	\$ 70,300								

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#### **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. On October 18, 2018, pursuant to Resolution No. DWR-CP-6, the Department authorized an additional increase of the issuance of Series 1 in an amount not to exceed \$600 million in principal and \$44.4 million in accrued interest, to expand its total CP capacity to \$1.4 billion in principal and \$103.6 million in accrued interest. Proceeds of the Series 1 Notes are expected to be used to provide funds for the construction of certain Water System Projects, including a portion of the costs of the Oroville Dam Spillway Recovery and Restoration Projects. The Series 2 program was established to pay for cost relating to the Oroville Dam Spillway Recovery and Restoration Project.

The Department has two revolving credit agreements with two commercial banks supporting its \$1.4 billion CP program. The Series 1 is supported by Bank of America, N.A (Bank of America) and the Series 2 by Wells Fargo Bank, National Association (Wells Fargo). The Series 1 expires on October 15, 2021 and Series 2 on February 25, 2021, but both can be extended for up to three years upon written request and approval of the banks. Both agreements require quarterly commitment fee payments on the first business day of each July, October, January and April. As of June 30, 2019, there were no borrowings with the banks under the current revolving credit agreements.

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 prior 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 current credit agreement with Bank of America, which became effective on October 18, 2018, Bank of America is obligated to provide up to \$600 million in principal at any one time and \$44.4 million of accrued interest. For sizing purposes, accrued interest is calculated at 10% per annum for 270 days on a maximum principal commitment of \$600 million.

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

The System's outstanding CP Series 1 and Series 2 contain certain provisions that under certain events of default, the credit agreements supported by Bank of America and Wells Fargo, respectively, will terminate and amounts outstanding become immediately due and payable.

As of June 30, 2019, the amount of CP notes outstanding was \$129.2 million for the Series 1, and \$560.7 million for the Series 2. As of June 30, 2018, the amount outstanding for the Series 1 was \$24.6 million, and \$556.1 for the Series 2. The weighted average rate for interest expense for the Series 1 Notes approximated 1.59% for the year ended June 30, 2019 and 1.27% for the year ended June 30, 2018. The weighted average rate for the year ended June 30, 2019 and 1.16% for the year ended June 30, 2018. The System expects a significant portion of the 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. The Department received approximately \$3.8 million in federal reimbursements in fiscal 2019 and \$69 million in fiscal 2018. 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 AZ to 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 U.S. Treasury Securities, such as State and Local Government Series (SLGS) 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, 2019 and 2018, outstanding Water System Revenue Bonds of \$504.5 million and \$653.8 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, 2019, and 2018, the outstanding balance of bonds that were defeased using the System's own existing resources was \$20.4 million and \$22.3 million, respectively. The cash deposited to the escrow was invested in U.S. Treasury – SLGS, to comply with yield restrictions and arbitrage rebate provisions of the Internal Revenue Code. SLGS are direct obligations of the U.S. Government and considered essentially risk-free.

On October 18, 2018, the System issued tax-exempt CVP Water System Revenue Bonds Series AZ with an average yield of 2.59% to refund a portion of commercial paper notes and portions of Series AF and AY. Bond proceeds with a par of \$95.2 million and premium of \$14.2 million, along with System funds on-hand in the amount of \$1.2 million were used to refund bonds with a par amount of \$109.1 million. The par amounts of the refunded bonds are as follows:

Bonds Refunded by Series AZ								
	Bond Series	Refunded By	Tax Basis	Refunding Type	Ref	unded Par		
-	Series AF	Series AZ	Tax-Exempt	Current	\$	5,200		
	Series AY	Series AZ	Tax-Exempt	Current		103,880		
	Total				\$	109,080		

The Series AZ refunding was undertaken to take advantage of lower interest rates. These transaction resulted in cash flow savings of \$3.05 million and economic gains (difference between the present values of the debt service payments on the old debt and new debt) of \$2.47 million, or 2.26% of the refunded bonds. The refunding resulted in a difference between the book value of the old debt and the amount required to retire the debt of \$146 thousand. This difference is considered a deferred gain 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 \$10.3 million in fiscal 2019 and \$10.1 million in fiscal 2018.

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## 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:

2018

Valuation Date	June 30, 2017
Measurement Date	June 30, 2018
Measurement Period	July 1, 2017 to June 30,

#### 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 \$63.1 million and \$58.3 million for the fiscal years ended June 30, 2019 and 2018, 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, 2018 and 2017:

#### **Contribution Rates**

	Measurement Dates								
	June 30,	, 2018	June 30	), 2017					
	State		State						
	Miscellaneous State Industrial		Miscellaneous	State Industrial					
Average active employee rate	6.766%	7.890%	6.737%	7.858%					
Employer rate of annual payroll	28.401%	20.408%	26.734%	19.246%					
Total	35.167%	28.298%	33.471%	27.104%					

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

The net pension liability at June 30, 2019 and 2018 was measured as of June 30, 2018 and 2017, respectively, by rolling forward the total pension liability using an annual actuarial valuation as of June 30, 2017 and 2016, respectively.

The total pension liabilities for the measurement dates of June 30, 2018 and 2017 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 2018 and in 2017
Inflation	2.50% in 2018 and 2.75% in 2017
Salary Increases	Varies by Entry Age and Service
Investment Rate of Return:	7.15% in 2018 and in 2017, net of pension plan investment expense but without reduction for administrative expenses; include inflation
Mortality Rate Table <sup>1</sup>	Derived using CalPers' Membership Data for all Funds
Post Retirement Benefit Increase	Contract COLA up to 2.00% and 2.75% in 2018 and 2017, respectively, until the Purchasing Power Protection Allowance floor on purchasing power applies, 2.50% and 2.75% thereafter in 2018 and 2017, respectively

The mortality table used was developed based on CalPERS specific data. The table includes 15 years of mortality improvements using the Society of Actuaries 90% of Scale MP 2016. For more details on this table, please refer to the 2017 CalPERS Experience Study and Review of Actuarial Assumptions report (Experience Study).

All other actuarial assumptions used in the June 30, 2017 and 2016 valuations were based on the results of an actuarial experience study for the period from 1997 to 2015, including updates to salary increase, mortality, and retirement rates. The Experience Study report may be accessed on the CalPERS' website under Forms and Publications.

#### **DISCOUNT RATE**

The discount rate used to measure the total pension liability at June 30, 2018 and 2017 measurement dates was 7.15%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current member contribution rates and that contributions from employers will be made at statutorily required rates, actuarially determined. Based on those assumptions of the Plans, the assets were projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected discount rate of 7.15% at June 30, 2018 and 2017 measurement dates, was applied to all plans in the Public Employees Retirement Fund. CalPERS' approach for the cash flow projections are presented in the GASB 67 and 68 Crossover Testing Report, which may be obtained from the CalPERS' website.

The long-term expected rate of return on pension plan investments of 7.15% 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+ 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 equal to the single equivalent rate calculated above and adjusted to account for assumed administrative expenses.

The following table reflects expected real rate of return by asset class.

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

	Curren	Current Target R		Real Return Years		urn Years
			Measurer	nent Dates		
Asset Class	2018	2017	2018 1	2017 <sup>2</sup>	2018 <sup>3</sup>	2017 4
Global Equity	50.0%	47.0%	4.80%	4.90%	5.98%	5.38%
Global Fixed Income	28.0%	19.0%	1.00%	0.80%	2.62%	2.27%
Inflation Sensitive	-	6.0%	0.77%	0.60%	1.81%	1.39%
Private Equity	8.0%	12.0%	6.30%	6.60%	7.23%	6.63%
Real Estate	13.0%	11.0%	3.75%	2.80%	4.93%	5.21%
Infrastructure and Forestland	-	3.0%	-	3.90%	-	5.36%
Liquidity	1.0%	2.0%	-	-0.40%	-0.92%	-0.90%
	100.0%	100.0%				

<sup>1</sup>An expected inflation of 2.00% used for this period

<sup>2</sup>An expected inflation of 2.50% used for this period

<sup>3</sup>An expected inflation of 2.92% used for this period

<sup>4</sup>An expected inflation of 3.00% 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, 2018 and 2017 measurement dates, calculated using the discount rate of 7.15% for both years, as well as what the net pension liability would be if it were calculated using a discount rate that is 1 percentage-point lower (6.15%) or 1 percentage-point higher (8.15%) than the current rate:

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		Measurem	surement Dates			
	2018			2017		
Discount Rate -1%		6.15%		6.15%		
Net Pension Liability	\$	755,996	\$	816,154		
Current Discount Rate		7.15%		7.15%		
Net Pension Liability	\$	527,333	\$	630,912		
Discount Rate +1%		8.15%		8.15%		
Net Pension Liability	\$	335,709	\$	436,546		

#### Sensitivity of the Net Pension Liability to Changes in the Discount Rate

#### 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, 2019, and 2018, the System reported a net pension liability of \$527.3 million and \$630.9 million, respectively, for its proportionate share.

The net pension liability at June 30, 2019 and 2018 was measured as of June 30, 2018 and 2017, respectively, by rolling forward the total pension liability using an annual actuarial valuation as of June 30, 2017 and 2016, 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, 2018 and 2017 was 1.6786% and 1.7268%, respectively.

For the year ended June 30, 2019 and 2018, the System recognized pension expense of \$83.8 million and \$92.5 million, respectively. At June 30, 2019 and 2018, the System has deferred outflows and deferred inflows of resources related to pensions as follows:

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

	2019			2018				
		red Outflows Resources		rred Inflows Resources		red Outflows Resources		rred Inflows Resources
System contribution subsequent to the measurement date	\$	63,075	\$	-	\$	119,175	\$	-
Changes in proportion		11,287		(19,286)		17,155		(7,584)
Changes of assumptions		47,568		(17,484)		73,403		-
Difference between expected and actual experience		5,657		(3,674)		2,764		(5,888)
Net difference between projected and actual earnings on plan investments		5,448		-		17,896		-
Total	\$	133,035	\$	(40,444)	\$	230,393	\$	(13,472)

The System reported \$63.1 million and \$119.2 million as deferred outflows of resources related to contributions subsequent to the measurement date of June 30, 2018 and 2017, respectively, will be/was recognized as a reduction of the net pension liability in the fiscal years ended June 30, 2020 and 2019, 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)					
Deferred					
	Outflows/(Inflows)				
Year Ended June 30:	of Resources				
2020	\$ 33,733				
2021		19,241			
2022	(16,449)				
2023		(7,009)			
Total	\$	29,516			

## 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, and can be subject to collective bargaining. The State funds the cost of providing health and dental insurance to retirees primarily on a "pay-as-you-go" basis, with a modest amount of prefunding for members of certain bargaining units, and other funded plans. The System's allocated share of the contribution was \$23.9 million and \$21 million for fiscal years ended June 30, 2019 and 2018, respectively.

#### ACTUARIAL METHODS AND ASSUMPTIONS

The net OPEB liability at June 30, 2019 and 2018 was measured as of June 30, 2018 and 2017, respectively, by rolling forward the total OPEB liability using an actuarial valuation as of June 30, 2018 and 2017, respectively.

The total OPEB liability for the measurement dates of June 30, 2018 and 2017 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. 75

#### Actuarial Assumptions:

Discount Rate	Blended rate for each valuation group, consisting of 7.00% in 2018 and 7.28% in 2017 when assets are available to pay benefits, otherwise 20-year Municipal G.O. Bond AA Index rate of 3.62% in 2018 and 3.56% in 2017
Inflation	2.50% in 2018 and 2.75% in 2017
Salary Increases	Varies by Entry Age and Service
Investment Rate of Return	7.00% in 2018 and 7.28% in 2017, net of OPEB plan investment expenses but without reduction for OPEB plan administrative expenses
Healthcare Cost Trend Rates	Pre-Medicare coverage: Actual rates for 2019, increasing to 7.50% in 2020, then decreasing 0.50% per year to an ultimate rate of 4.50% for 2026 and later years Post-Medicare coverage: Actual rates for 2019, increasing to 8.0% for 2020 then decreasing 0.50% per year to an ultimate rate of 4.50% for 2027 and later years Dental coverage: 0.26% in 2019 and 4.50% thereafter
Mortality Rate Table	Derived using CalPERS' membership data for all members

The mortality table used was developed based on CaIPERS' specific data. The table includes 15 years of mortality improvements using the Society of Actuaries 90% Scale MP 2016. For more details on this table, refer to the 2017 CaIPERS Experience Study and Review of Actuarial Assumptions report (Experience Study) for the period from 1997 to 2015. Other demographic assumptions used in the June 30, 2018 and 2017 valuations were also based on the results of the Experience Study, including updates to termination, disability, and retirement rates. The Experience Study report can be obtained from CaIPERS' 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, 2018 and 2017 total OPEB liability consists of the 20-year Municipal G.O. Bond AA Index rate of 3.62% as of June 30, 2018 and 3.56% as of June 30, 2017, as reported by Fidelity Index, when prefunding assets are not available to pay benefits, and 7.00% and 7.28% at June 30, 2018 and 2017 measurement dates, respectively, 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, 2018 and 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+ years), a single expected return rate of 7.00% and 7.28% at June 30, 2018 and 2017 measurement dates, respectively, was calculated for the combined short-term and long-term periods. 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.

Long-Term Expected Rate of Return by Asset Class								
	Current Target Allocation		Real Return Years 1-10		Real Reti	urn Years  +		
	Measurement Dates							
Asset Class	2018	2017	2018 1	2017 <sup>2</sup>	2018 <sup>3</sup>	2017 4		
Global Equity	59.0%	57.0%	4.80%	5.25%	5.98%	5.71%		
Global Fixed Income	25.0%	27.0%	1.10%	1.79%	2.62%	2.40%		
Treasury Inflation-Protected Securities	5.0%	5.0%	0.25%	1.00%	1.46%	2.25%		
Real Estate Investment Trust	8.0%	8.0%	3.50%	3.25%	5.00%	7.88%		
Commodities	3.0%	3.0%	1.50%	0.34%	2.87%	4.95%		
	100.0%	100.0%						

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

<sup>1</sup>An expected inflation of 2.00% used for this period

 $^{2}\mbox{An}$  expected inflation of 2.50% used for this period

<sup>3</sup>An expected inflation of 2.92% used for this period

<sup>4</sup>An expected inflation of 3.00% 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, 2018 and 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

	Measurement Dates			
Net OPEB Liability	20	2018 2017		
Blended Discount Rate -1%	\$	904,585	\$	1,076,245
Current Blended Discount Rate		771,286		912,912
Blended Discount Rate +1%		664,462		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, 2018 and 2017:

Sensitivity of the Net OPEB Liability to Changes in the Healthrecare Cost Trend Rates					
	Measurement Dates				
Net OPEB Liability		2018		2017	
Healthcare Cost Trend Rates -1%	\$	676,894	\$	774,022	
Current Healthcare Cost Trend Rates		771,286		912,912	
Healthcare Cost Trend Rates +1%		890,940		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, 2019 and 2018, the System reported a net OPEB liability of \$771.3 million and \$912.9 million, respectively, for its proportionate share.

For the measurement period ended June 30, 2018 and 2017, the net OPEB liability was measured by rolling forward the total OPEB liability using an actuarial valuation as of June 30, 2018 and 2017, respectively. The System's proportion of the net OPEB liability was based on the System's pay-as-you-go relative to the pay-as-you-go of all the valuation groups plan members, as calculated by the State Controller's Office. The System's proportionate share of the net OPEB liability as of June 30, 2018 and 2017 was 0.9011% and 1.0031%, respectively.

For the years ended June 30, 2019 and 2018, the System recognized OPEB expense of \$28.2 million and \$52.5 million, respectively. At June 30, 2019 and 2018, the System has deferred outflows and deferred inflows of resources related to OPEB as follows:

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

	2019				2018			
				Deferred Inflows Deferred Outflows of Resources of Resources				
System contribution subsequent to the measurement date	\$	23,948	\$	-	\$	21,016	\$	-
Net differences between actual and expected contributions		195		(2,010)		237		-
Differences in PAY GO contributions		491		(334)		-		-
Changes in proportion		-		(87,994)		-		-
Changes of assumptions		-		(84,565)		-		(81,622)
Differences between expected and actual experience		-		(56,009)		-		-
Net differences between projected and actual earnings on OPEB plan investments		12		(74)		-		(111)
Total	\$	24,646	\$	(230,986)	\$	21,253	\$	(81,733)

The System reported \$23.9 million and \$21 million as deferred outflows of resources related to contributions subsequent to the measurement date of June 30, 2018 and 2017, respectively, will be/was recognized as a reduction of the net OPEB liability in the fiscal years ended June 30, 2020 and 2019, respectively. 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)								
	Deferred							
	(	Dutflows/(Inflows)						
Year Ended June 30:		of Resources						
2020	\$	(26,061)						
2021		(26,061)						
2022		(29,583)						
2023		(40,136)						
2024		(40,060)						
Thereafter		(68,387)						
Total	\$	(230,288)						

## 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, 2019 and 2018, were approximately \$75.5 million and \$38.4 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 \$97.4 million over periods ranging from one to 23 years. Payments made under these contracts approximated \$5.3 million and \$5 million for the years ended June 30, 2019 and 2018, respectively.

The System has long-term power purchase contracts with anticipated future payments of approximately \$704 million, which includes operation and maintenance expense, over periods ranging from one to 48 years. The remaining amounts of fixed obligations under the long-term power contracts as of June 30, 2019, are as follows:

Fixed Obligat	tions						
	Year	Trar	Transmission		Power		Total
	2020	\$	5,572	\$	39,322	\$	44,894
	2021		5,572		37,284		42,856
	2022		5,572		37,284		42,856
	2023		5,572		37,284		42,856
	2024		5,572		37,284		42,856
	2025-2067		69,542		512,626		585,168
	Total	\$	97,402	\$	704,084	\$	801,486

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, which expires in 2037, 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. Debt service payments are to be made until all of the bonds issued by the District to finance the Project have been retired in fiscal 2019. As of June 30, 2019, all bonds have been fully redeemed. Payments to the District totaled approximately \$13.7 million and \$14.2 million during the years ended June 30, 2019, and 2018, respectively.

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, 2019 are as follows:

LEC Bonds Fixed Oblig	ations	
Year		Total
2020	\$	9,209
2021		9,207
2022		9,209
2023		9,209
2024		9,211
2025-2029		46,038
2030-2034		46,039
2035		9,210
	\$	147,332

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Market value information for certain power purchases, sales, and exchange contracts are disclosed at June 30, 2019 using forward market prices discounted at the prevailing risk-free interest rate. All purchase contracts expired 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, 2019 are as follows:

Energy Commitments 2019				
	Number of Contracts	Total Capacity (MWh)	Ju	Value at ne 30, 2019
Long-term energy purchases	8	488	\$	(181,940)
Total			\$	(181,940)

Energy Commitments 2018				
	Number of Contracts			Value at ne 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, 2018 are as follows:

#### 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. The System 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 the System'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 the System's CEQA compliance with respect to the Kern Fan Element transfer from the System to KCWA. The two lawsuits filed in Kern County Superior Court were transferred to the Sacramento Superior Court. In December 2012, the System 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 the System, 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 System 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 System'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 Department 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 28 Contractors, which included certain waivers allowing DWR to resume issuing revenue bonds in May 2008. The Water Contractors that have signed the Tolling and Waiver Agreements have more than 99 percent of the Table A amounts and make more than 99 percent of the annual Water Supply Contract payments.

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 tolls (i.e. suspends) until December 31, 2021 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 2022, (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 Agreements. One such issue was raised in an October 2019 letter the System received from the Metropolitan Water District of Southern California which asserted, among other items, that a provision in the

Water Supply Contracts precludes the System from seeking reimbursement from the Water Contractors for their allocated share of claims and damages related to the control, carriage, handling, use, disposal or distribution of System water prior to the delivery of water to the Water Contractors. In the opinions of management and the System's legal counsel such allocated amounts have been properly included in past bills to the Water Contractors and will continue to be recoverable from the Water Contractors in the future under the long-term water supply contracts. 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, or that the System's positions on the issues will prevail, 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 rejected these claims, which required the claimants to file a lawsuit within six months of the rejection to pursue their claims in court.

Two separate class action lawsuits have been filed. The first is 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 other class action identifies three classes of plaintiffs: 1) the "Diminution Class," i.e., plaintiffs who allege diminution in property value; 2) the "Property Loss Class," i.e., plaintiffs who allege property loss; and 3) the "Business Loss Class," i.e., plaintiffs who allege lost business income. The coordination trial judge granted DWR's Motion to Defeat Class Certification. The plaintiffs in the first lawsuit filed an

appeal. To date, the plaintiffs in the second lawsuit have not.

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. The lawsuit filed by the County of Butte has been settled.

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. A separate lawsuit filed by South Feather Water & Power Agency has been settled.

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 District Attorney 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 is being vigorously contested by the Department. In June 2019, the Department received a letter from the State Water Contractors organization which asserted that a provision in the water supply contracts would preclude the Department from seeking reimbursement from the Water Contractors for their allocated share of any judgment or settlement amount in the Butte County lawsuit. In the opinions of management and the Department's legal counsel such allocated amounts, if incurred, would be recoverable from the Water Contractors under the long-term water supply contracts.

All of the above lawsuits have been coordinated for purposes of pre-trial activities and been transferred to the Sacramento County Superior Court. Discovery and depositions in the coordinated cases have been and are continuing to be conducted. Other pre-trial motions, including the motion to certify the class in the class action lawsuit and a motion to continue the trial date have, or will take place shortly. Unless otherwise noted above, the eventual outcome of these lawsuits is uncertain. The Department, however, continues to defend itself against these claims and lawsuits and believes they will not have a material adverse effect on its ability to continue to operate and maintain the System and pay its related liabilities.

#### Water Supply Contract Extension Litigation

As discussed on the transmittal letter, the Director of DWR approved the contract extension amendment project under CEQA and executed the amendment with Metropolitan on December 11, 2018 and as of April 1, 2020, twenty-one Contractors have executed the extension amendment with the Department.

On the same date that the Director executed the first contract extension amendment, December 11, 2018, the Department filed an action in Sacramento County Superior Court seeking to validate the contract extension amendment. In February 2019, four groups filed answers in the validation action in opposition to the Department's request to validate the amendment. One answer was filed by several environmental organizations; the second answer was filed by several other environmental organizations and an Indian Tribe; the third answer was filed by a number of counties and public water agencies, including the County of Butte and the Plumas County Flood Control and Water Conservation District,

both of which are Contractors; and the fourth answer was filed by the South Delta Water Agency. Six Contractors have filed answers in support of the extension amendment.

All three cases – the validation action and the two environmental lawsuits – have been determined to be related and assigned to a single judge in the Sacramento Superior Court for all purposes. These cases are currently in the pre-trial stage.

#### 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.

#### 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 addressed with plaintiffs 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 filed answers to this action. The validation action was 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 was 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 participated in the hearing. Part one was completed in July 2017, while part two of the hearing began in February 2018 and concluded in August 2018. No determination was reached.

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 assessed the nature and extent of any new permit and planning work that may be necessary as a result of the Governor's statements. On April 29, 2019, Governor Newsom issued Executive Order N-10-19, which detailed his new policy direction regarding water issues in the state, including Delta conveyance, and directed several state agencies to take action implementing his policies. On May 2, 2019, DWR took several actions as a result of the Executive Order, including rescinding all project approvals for the California WaterFix and withdrawing its Petition for Change in Points of Diversion and Rediversion and Application for Section 401 Certification. This withdrawal ended the water rights hearing before the SWRCB. On several dates in July 2019, DWR and all plaintiffs in the coordinated lawsuits. On August 23, 2019, ten plaintiff groups filed motions for attorney fees and memoranda of costs. On January 9, 2020, the Sacramento Superior Court denied all plaintiff's motions and the hearing, originally set for January 10, 2020 was taken off calendar as no parties requested oral argument. As of April 15, 2020, six parties have filed motions of appeal of the Sacramento Superior Court's January 9, 2020 ruling.

#### **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, 2019 and 2018:

#### **Pollution Remediation Liabilities**

	 2019		2018
Reid Gardner Power Plant	\$ 25,679	\$	22,520
Delta Mercury Control Program	2,802		6,316
Green House Gas Emissions Credits	13,650		10,859
Banks Pumping Plant	5,929		6,100
Pearblossom O&M Center	2,433		2,318
Oroville Wildlife Area	1,348		1,284
Del Valle Pumping Plant	 495		471
Total Liabilities	52,336		49,868
Less current portion	 (10,358)		(8,557)
Total Long-term liabilities	\$ 41,978	\$	41,311

#### **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, as needed, 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 both fiscal 2019 and 2018. DWR expects to pay \$5.4 million of the total estimated financial liability during fiscal 2020.

#### Delta Mercury Control Program

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 expended approximately \$1.3 million in fiscal 2019 and \$1.2 million in fiscal 2018.

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 \$13.7 million. The System surrendered \$3.5 million and \$259 thousand of compliance instruments under this program during fiscal 2019 and 2018, 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.

Evidence of burrowing has been detected at the Harvey O. Banks Pumping Plant. DWR is addressing the burrowing issue by constructing a new burrowing resistant. This project is in the design phase currently, awaiting approval by CalRecycle and Contra Costa County. Construction is projected to go from April to August 2020. It is noted that no hazardous substances or hazardous wastes are known to be part of the waste; at this time the landfill waste is believed to consist only of construction debris. The System expended approximately \$273 thousand during fiscal 2019.

Remediation activities have not formally commenced at the other two 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.

As described in Note 10, "2017 Oroville Dam Spillway Emergency and Feather River Flooding," a number of claims and lawsuits have been filed as a result of the event. Liabilities are reported when it is probable that a loss has occurred, and the amount of the loss can be reasonably estimated. Liabilities include an estimated amount for claims that have been incurred but not reported. Claims liabilities are calculated considering the effect of recent claim settlement trends including frequency and amount of payouts, and other economic and social factors. The following table presents the claim liabilities for the year ended June 30, 2019:

Unpaid Claims Liabilities	
	 2019
Unpaid claims, beginning	\$ -
Incurred claims	52,259
Claims payments	 -
Unpaid claims, ending	\$ 52,259

## 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 2019 % Total 2018 % Total The Metropolitan Water District \$ 565,123 51.28% \$ 563,746 50.30% Kern County Water Agency 119,531 10.85% 131,042 11.69% San Bernardino Valley MWD 71,409 6.48% Coachella Valley Water District 65,006 5.80%

The System sold power to 13 and 7 power entities during the years ended June 30, 2019 and 2018, 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							
	2019		% Total	2018		% Total	
California Independent System Operator	\$	56,472	58.64%	\$	63,644	72.20%	
Northern California Power Agency		26,843	27.87%		17,638	20.01%	
Western Area Power Administration		8,116	8.43%		6,209	7.04%	

Similarly, the System purchased power from 19 power entities during the years ended June 30, 2019 and 2018. 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					
	2019		% Total	 2018	% Total
California Independent System Operator	\$	191,047	65.67%	\$ 236,195	69.04%
Northern California Power Agency		33,899	11.65%	25,805	7.54%
Kings River Conservation District		15,939	5.48%	-	-

## 13. Segment Information

The table below presents the condensed statement of net position, the statement of revenues, expenses and changes in net position and the statement of cash flows for the System's two segments, as of and for the years ended June 30, 2019 and 2018.

Segment

		2019			2018 (As restated)			
	Ac	tivities Allowed U	nder	Activities Allowed Under				
		Central Valley			Central Valley			
	Burns-Porter Act	Project Act	Total	Burns-Porter Act	Project Act	Total		
Condensed Statement of Net Position: Assets								
Current Assets	\$ 565,345	\$ 516,224	\$ 1,081,569	\$ 507,261	\$ 384,563	\$ 891,824		
Other Assets	1,542,850	244,400		1,485,481	235,875	1,721,356		
Capital Assets	1,047,674	4,473,288		1,031,684	3,934,573	4,966,257		
Total Assets Deferred outflows of resources	3,155,869 157,681	5,233,912 138,932		3,024,426 251,646		7,579,437 401,026		
Total assets and deferred		130,732		231,040		401,020		
outflows of resources	\$ 3,313,550	\$ 5,372,844	\$ 8,686,394	\$ 3,276,072	\$ 4,704,391	\$ 7,980,463		
Liabilities								
Current liabilities	\$ 217,901			\$ 143,956	\$ 495,340	\$ 639,296		
Noncurrent liabilities	1,496,592	3,802,273	5,298,865	1,720,685	3,356,660	5,077,345		
Total liabilities Deferred inflows of resources	1,714,493	4,316,540		1,864,641	3,852,000	5,716,641		
Total liabilities and deferred	956,920	532,092	1,489,012	725,378	344,406	1,069,784		
inflows of resources	2,671,413	4,848,632	7,520,045	2,590,019	4,196,406	6,786,425		
Net position								
Net investment in capital assets	608,195	175,091	783,286	645,187	297,431	942,618		
Restricted	33,942	349,121	383,063	40,866	210,554	251,420		
Total net position	642,137	524,212	1,166,349	686,053	507,985	1,194,038		
Total liabilities, deferred inflows of resources, and net position	\$ 3,313,550	\$ 5,372,844	\$ 8,686,394	\$ 3,276,072	\$ 4,704,391	\$ 7,980,463		
Condensed Statements of Revenues , Expenses, a	and Changes in N	et Position:						
Operating revenues								
Water supply	\$ 764,413			\$ 840,698	\$ 235,540	\$ 1,076,238		
Power sales Federal and State reimbursements	96,272 21,497	36 21,096	,	88,112 21,081	36 21,046	88,148 42,127		
rederal and State reimpursements	882,182	· · · · · ·		949,891	256,622	1,206,513		
Depreciation and amortization Other operating expense	(21,827) (734,362)	(72,364) (49,811)		(20,987) (801,157)	(59,114) (31,667)	(80,101) (832,824)		
Income from operations	125,993	145,295		127,747	165,841	293,588		
Nonoperating revenues/expenses	123,773	145,275	271,200	127,747	105,041	273,500		
Capital revenues recovered (deferred), net	t (145,938)	(188,932)	(334,870)	(181,237)	(113,627)	(294,864)		
Interest expense	(5,800)			(3,404)		(105,429)		
Transfers In/(Out)	(27,928)	27,928	-	(62,864)	62,864	-		
Investment income (loss), net	9,755	12,727		5,837	9,516	15,353		
Other revenues (expenses), net		129,892			42,493	42,493		
Total nonoperating revenues/expenses	(169,911)	(129,066) 16,229		(241,668)		(342,447)		
	(43,918)			(113,921)		(48,859)		
Net position, beginning of year, as restated Net position, end of year	686,054 \$ 642,136			799,975 \$ 686,054		1,242,897 \$ 1,194,038		
Condensed Statements of Cash Flows:								
Net cash provided by (used in)								
Operating activities	\$ 153,757	\$ 197,048	\$ 350,805	\$ 169,020		\$ 498,025		
Capital and related financing activities	(159,133)	(219,426)				(586,626)		
Investing activities	9,939	11,760	21,699	5,830	18,704	24,534		
Net (decrease) increase in cash and cash equivalents	4,563	(10,618)	(6,055)	58,047	(122,114)	(64,067)		
Cash and equivalents, beginning of year	4,363	424,000		396,632		942,746		
Cash and equivalents, end of year	\$ 459,242					\$ 878,679		

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## 14. New Governmental Accounting Standards

#### 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 but the System does not currently have any AROs based on the guidelines in this Statement.

#### 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. 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. 87 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 financial statement items in connection with GASB No. 88 are presented in this fiscal year 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 2020 and thereafter. The System is currently evaluating the

impact this Statement will have on its financial statements.

#### GASB Statement No. 91

In May 2019, the GASB issued Statement No. 91, Conduit Debt Obligations. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. The requirements of GASB No. 91 are effective for fiscal year 2022 and thereafter. The System is currently evaluating the impact this Statement will have on its financial statements.

#### GASB Statement No. 92

In January 2020, the GASB issued Statement No. 92, Omnibus 2020. The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. The requirements of GASB No. 92 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. 93

In March 2020, the GASB issued Statement No. 93, Replacement of Interbank Offered Rates. The objective of this Statement is to address those and other accounting and financial reporting implications that result from the replacement of an interbank offered rate. The requirements of GASB No. 93 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. 94

In March 2020, the GASB issued Statement No. 94, Public-Private and Public-Public Partnerships and Availability Payment Arrangements. The objective of this Statement is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements. The requirements of GASB No. 94 are effective for fiscal year 2023 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 \$1,021 million as of June 30, 2019, 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 \$73 million of approved Federal Emergency Management Agency (FEMA) Disaster Grant funds as of June 30, 2019. 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.

## REQUIRED SUPPLEMENTARY INFORMATION

#### REQUIRED SUPPLEMENTARY INFORMATION

#### Schedule of the System's Proportionate Share of the Net Pension Liability

Last 10 Years\* (in thousands)

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Fiscal Year	2019	2018	2017	2016	2015
The System's proportion of the net pension liability	1.6786%	1.7268%	1.6813%	1.7191%	1.6927%
The System's proportionate share of the net pension liability	\$ 527,333	\$ 630,912	\$ 556,748	\$ 485,502	\$ 426,935
The System's covered payroll	\$ 206,175	\$ 194,340	\$ 188,680	\$ 181,151	\$ 164,571
The System's proportionate share of the net pension liability as a percentage of their covered payroll	255.77%	324,64%	295.08%	268.01%	259.42%
Plan fiduciary net position as a percentage of the total pension liability	71.83%	66.42%	66.81%	70.68%	73.05%
Measurement date:	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014

\* - Fiscal year 2015 was the 1st year of implementation, therefore only five years are shown.

#### Schedule of the System's Pension Contributions

Last 10 Years\* (in thousands)

Fiscal Year	2019 2018		2017		2016		2015		
Contractually required contribution	\$ 63,	075 \$	58,265	\$	51,594	\$	47,978	\$	44,393
Contributions in relation to the contractually required contribution	63,	075	119,175		51,594		47,978		44,393
Contribution deficiency (excess)	\$	- \$	(60,910)	\$		\$	_	\$	-
System's covered payroll	\$ 211,	364 \$	206,175	\$	194,340	\$	188,680	\$	181,151
Contributions as a percentage of covered payroll	29.8	34%	57.80%		26.55%		25.43%		24.51%

 $\star$  - Fiscal year 2015 was the 1st year of implementation, therefore only five years are shown.

#### Schedule of the System's Proportionate Share of the Net OPEB Liability

Last 10 Years\* (in thousands)

Fiscal Year		2019		2018		
The System's proportion of the net OPEB liability		0.9011%		1.0031%		
The System's proportionate share of the OPEB liability	\$	771,286	\$	912,912		
The System's covered payroll	\$	206,175	\$	194,340		
The System's proportionate share of the OPEB liability as a percentage of their covered payroll		374.09%		469.75%		
Plan fiduciary net position as a percentage of the total OPEB liability		1.011%		0.546%		
Measurement date:	Ju	ne 30, 2018	Ju	ine 30, 2017		

 $\star$  - Fiscal year 2018 was the 1st year of implementation, therefore only two years are shown.

#### Schedule of the System's OPEB Contributions

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Last 10 Years\* (in thousands)

Fiscal Year	 2019	2018		
Actuarially determined contribution	\$ 40,950	\$	44,788	
Contributions in relation to the actuarially determined contribution	 23,948		21,016	
Contribution deficiency (excess)	\$ 17,002	\$	23,772	
System's covered payroll	\$ 211,364	\$	206,175	
Contributions as a percentage of covered payroll	11.33%		10.19%	

\* - Fiscal year 2018 was the 1st year of implementation, therefore only two years are shown.

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## SUPPLEMENTARY INFORMATION

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

Debt Service Coverage	(amounts in thousands)					
	2019			2018		
Water supply revenues, Central Valley Project Act	\$	246,338	\$	235,540		
Add: Cover Collected as Proceeds Due to Water Contractors		58,967		56,305		
Less: Devil Canyon Castaic Revenues		(21,878)		(21,451)		
Revenues not available for Debt Service		(11,255)		(5,230)		
Net CVP revenues available for debt service		272,172		265,164		
Principal and interest for revenue bonds	\$	211,558	\$	207,341		
Debt service coverage		128.7%		127.9%		

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 \$246.3 million in fiscal 2019 and \$235.6 million in fiscal 2018, respectively in Water Supply Revenues of the System's (CVP) segment.

In fiscal 2019, the revenues include: an increase of \$59 million in refundable proceeds, a decrease of \$21.9 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 \$11.3 million in miscellaneous revenue not available for debt service.

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.

# STATISTICAL SECTION

A view of Lake Shasta, part of the Central Valley Project, operated by the U.S. Department of the Interior, Bureau of Reclamation.

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# 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.

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# Contents

# **FINANCIAL TRENDS**

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

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# **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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*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.* 

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

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# **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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#### STATISTICAL SECTION

# Schedule of Changes in Net Position (Unaudited)

Last Ten	Fiscal Years (in th	ousands)		
	2010	2011	2012	2013
OPERATING REVENUES:				
Water supply	\$ 853,158	\$ 874,748	\$ 860,891	\$ 931,808
Power sales	165,664	193,154	148,360	146,277
Federal and State reimbursements	24,021	28,294	36,561	52,397
Total operating revenues	1,042,843	1,096,196	1,045,812	1,130,482
OPERATING EXPENSES:				
Operations and maintenance	435,801	428,559	526,402	545,413
Purchased power	212,658	342,446	271,377	258,899
Depreciation and amortization expense	80,813	100,257	87,400	85,236
Operating expenses recovered (deferred), net	189,000	118,325	67,063	22,261
Total operating expense	918,272	989,587	952,242	911,809
NET OPERATING INCOME (LOSS)	124,571	106,609	93,570	218,673
NONOPERATING REVENUES (EXPENSES):				
Capital revenues recovered (deferred), net	19,823	22,812	43,834	(174,356)
Interest expense	(151,390)	(134,996)	(107,770)	(53,492)
Other revenues (expenses), net	6,996	5,575	(29,634)	9,175
Total nonoperating revenues (expenses)	(124,571)	(106,609)	(93,570)	(218,673)
CHANGE IN NET POSITION	\$-	\$-	\$-	\$-

\_\_\_\_\_

		Last Ten Fiscal Y	ears (in thousands)	)	
2014	2015	2016	2017	2018 (As restated)	2019
\$ 789,730	\$ 883,538	\$ 948,105	\$ 1,082,587	\$ 1,076,238	\$ 1,010,751
131,952	91,780	71,236	85,089	88,148	96,308
52,186	44,060	67,309	55,664	42,127	42,593
973,508	1,019,378	1,086,650	1,223,340	1,206,513	1,149,652
557,209	404,627	511,926	544,925	555,163	645,191
241,444	202,780	219,661	339,993	342,115	290,908
68,896	81,495	77,170	77,265	80,101	94,191
-	-	65,004	57,066	(64,454)	(151,926
867,549	688,902	873,761	1,019,249	912,925	878,364
105,959	330,476	212,889	204,091	293,588	271,288
(42,934)	(243,945)	(118,510)	(130,147)	(294,864)	(334,870
(115,499)	(96,082)	(106,978)	(105,768)	(105,429)	(116,481
52,474	9,551	12,599	31,824	57,846	152,374
(105,959)	(330,476)	(212,889)	(204,091)	(342,447)	(298,977
\$-	\$-	\$-	\$-	\$ (48,859)	\$ (27,689

# Schedule of Changes in Net Position (Unaudited)

\_\_\_\_\_

Schedule of Net Position by Component (Unaudited)	Last	2010 2011	ET POSITION Net investment in capital assets	stricted for: Debt service and plant replacements 159,508 162,056 SWP related activities 604,114 588,107	TOTAL NET POSITION	Source: State Water Resources Development System \$1,000,000 \$800,000 \$600,000 \$600,000 \$100,000 \$300,000 \$200,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$200	zorz vestment in capital assets
	Last Ten Fiscal Years (in thousands)	2012 2013	516,670 \$	156,913 150,825 531,845 588,255	\$ 1,202,428 \$ 1,205,4	NET POSITION	estricte
	housands)	2014	466,348 \$ 674,336 \$	825 155,116 255 375,976 -	428 \$ 1,205,428 \$	2015 2016	related activities
		2015	585,309 \$	155,857 464,262	1,205,428 \$ 1	2017	
		2016 (As	736,203 \$	177,330 291,895	,205,428 \$	2018	<ul> <li>Restricted for debt service</li> </ul>
		2017 2018 (As restated) (As restated)	748,439 \$ 9	193,889 300,569	1,242,897 \$ 1,	6100	
			942,618 \$	197,363 54,057	194,038 \$ 1,		
		2019	783,286	214,513 168,550	166,349		

#### STATISTICAL SECTION

Schedule of Significant Revenues by Source (Unaudited)	Ignificant Rev	enues by So	purce (Unau	dited)							
				Last T	Last Ten Fiscal Years (in thousands)	in thousands)					
	I	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Operating Revenues by Source Water supply Power sales		\$ 853,158 165,664	\$ 874,748 193,154	<pre>\$ 860,891 148,360</pre>	\$ 931,808 \$ 146,277	\$ 789,370 <b>\$</b> 131,952	883,538 \$ 91,780	948,105 71,236	\$ 1,082,587 85,089	\$ 1,076,238 88,148	\$ 1,010,751 96,308
TOTAL	<del>3</del> 7	\$ 1,018,822 \$		1,067,902 \$ 1,009,251	\$ 1,078,085	\$ 921,322 \$		1,019,341	\$ 1,167,676	<u>975,318</u> <b>\$ 1,019,341 \$ 1,167,676 \$ 1,164,386 \$ 1,107,059</b>	\$ 1,107,059
Source: State Water Resources Development System	sources Developr	nent System									
					OPERATING REVENUES BY SOURCE	VENUES BY SC	JURCE				
\$1,400,000											
\$1,200,000											
\$1,000,000											
\$800,000											
\$600,000											
\$400,000											
\$200,000											
÷											
-	2010	2011	2012	2013	2014	2015	2016		2017	2018	2019
	Power sales	Water	Water supply								

# For the years ended June 30, 2019 and 2018 | **119**

STATISTICAL SECTION

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

		Water S	upply <sup>a</sup>	
Financial Statement Year	Calendar Year	thly Service rge (fixed)	Varia	ble Cost
2010	2009	\$ 148.49	\$	28.33
2011	2010	162.20		22.45
2012	2011	162.64		26.3
2013	2012	159.89		26.79
2014	2013	166.37		28.2
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		25.7
2019	2018 <sup>c</sup>	173.24		25.9

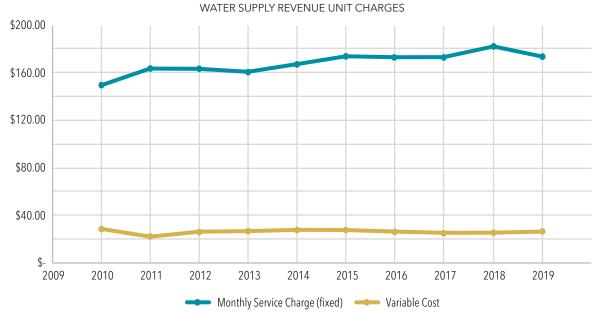
Last Ten Years

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

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



Largest Distribution Water Revenue Accounts (Unaudited)	ue Accounts (Una	audited)					
		Ŭ	urrent Year and	Current Year and Nine Years Prior			
		FY 2019				FY 2010	
Customer	Annual Water Sales	Rank	Percentage of Total <sup>a</sup>	Customer	Annual Water Sales	Rank	Percentage of Total <sup>a</sup>
THE METROPOLITAN WATER DISTRICT KERN COUNTY WA - AG SAN BERNARDINO VALLEY MWD	<pre>\$ 565,122,956 119,531,326 71,408,869</pre>	~ ∩ m	51% 11% 6%	THE METROPOLITAN WATER DISTRICT KERN COUNTY WA - AG	\$ 486,300,274 76,784,254	− 0	57% 9%
Subtotal	\$ 756,063,151		68%	Subtotal	\$ 563,084,528		66%
Total Water Sales	\$ 1,010,750,706			Total Water Sales	\$ 853,158,375		
Source: State Water Resources Development System a) Percentage of total is based on total revenues billed under the water supply contracts	tern billed under the water su	upply contrac	sts				
32% EV 2010		Metrop District	Metropolitan Water District	Kern County Water Agency	34%	EV 2010	
%1C /107 11 %9	2		San Bernardino Valley MD	o Other		7010	57%

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STATISTICAL SECTION

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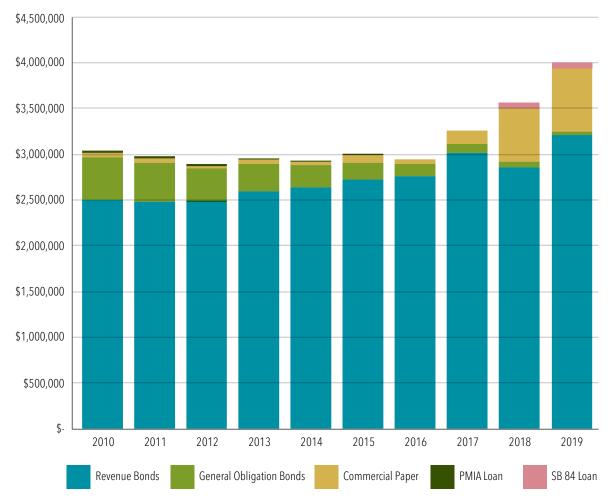
Largest Distribution Power Sales Revenue Accounts (Unaudited)	Accounts (Una	udited	(F				
		Currer	nt Year and	Current Year and Nine Years Prior			
	FY 2	FY 2019			ΕΥ	FY 2010	
Customer	Annual Revenues	Rank	Percentage of Total	Customer	Annual Revenues	Rank	Percentage of Total
CALIFORNIA INDEPENDENT SYSTEM OPERATOR NORTHERN CALIFORNIA POWER AGENCY WESTERN AREA POWER ADMINISTRATION	<pre>\$56,471,763 26,843,035 8,116,477</pre>	0 0 <del>-</del>	59% 5 28% 5 8%	CALIFORNIA INDEPENDENT SYSTEM OPERATOR SOUTHERN CALIFORNIA EDISON	\$ 67,922,226 28,162,874	~ ~	41% 17%
Subtotal	\$91,431,275	II	95%	Subtotal	\$ 96,085,100		58%
Total Power Sales	\$96,308,281		r.	Total Power Sales	\$165,663,966		
Source: State Water Resources Development System	California Independent System Operator Western Are	ndependent erator Western Area P	ndependent erator Western Area Power Administration	Northern California Power Operator Southern California Edison	FY 2010		41%

#### STATISTICAL SECTION

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

Fiscal Year	Rev	enue Bonds	Oblig	neral gation Inds	С	ommercial Paper	 PMIA Loan	SI	B 84 Loan	 Total
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
2019		3,222,577		28,090		689,984	-		60,910	4,001,561

Last Ten Fiscal Years (in thousands)



# Schedule of Debt Service Coverage (Unaudited)

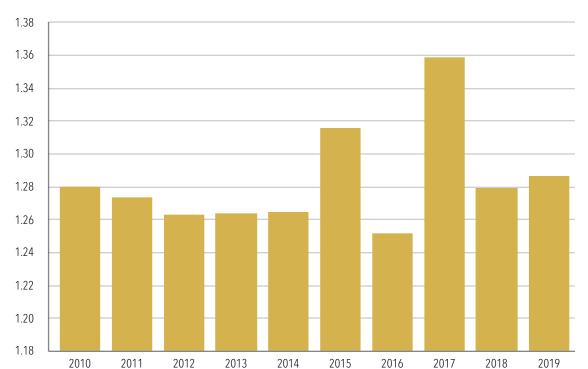
Last Ten Fiscal Years (in thousands)

Debt Service Requirements

\_ \_ \_ \_ \_ \_ \_ \_ \_ \_

Fiscal Year	er Supply	Colle	Cover ected for t Service	No <sup>-</sup> f	evenues t Available for Debt Service	Ava	Revenue ailable for ot Service	Pı	incipal		nterest	Total	Covera	age
2010	\$ 279,660	\$	54,086	\$	62,579	\$	271,167	\$	93,270	\$	118,516	\$ 211,786	1.	28
2011	320,631		55,542		96,016		280,157		104,535		115,439	219,974	1.	27
2012	307,438		56,385		85,448		278,375		111,555		108,900	220,455	1.	26
2013	372,748		54,677		156,404		271,021		119,280		95,098	214,378	1.	26
2014	281,461		51,786		72,829		260,418		109,610		96,313	205,923	1.	26
2015	225,899		54,316		26,405		253,810		110,105		82,819	192,924	1.	32
2016	255,106		57,779		28,325		284,560		130,095		97,255	227,350	1.	25
2017	241,117		56,321		26,248		271,190		128,035		71,584	199,619	1.	36
2018	235,540		56,305		26,681		265,164		132,050		75,291	207,341	1.	28
2019	246,338		58,967		33,133		272,172		122,490		89,068	211,558	1.	29

Source: State Water Resources Development System



DEBT COVERAGE RATIO

# Schedule of Demographic and Economic Indicators (Unaudited)

\_\_\_\_\_

Year	Population (in thousands)	onal Income n millions)	 ita Personal come	Unemployment Rate
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%
2018	39,557	2,475,727	62,586	4.4%

Last Ten Years

1 - Source: Economic Research Unit, California Department of Finance

2 - Note: 2019 information is not available and therefore not presented

#### STATISTICAL SECTION

#### Schedule of California Number of Employees by Industry (Unaudited)

	2009	2010	2011	2012	2013
Agriculture, Forestry, Fishing, Hunting	434,275	440,265	449,614	463,476	463,169
Mining	23,244	25,011	27,016	28,475	27,986
Utilities	60,288	57,175	58,199	59,160	58,240
Construction	601,982	562,922	580,550	609,365	656,000
Manufacturing	1,261,582	1,250,589	1,257,097	1,264,017	1,265,860
Wholesale Trade	636,330	647,193	661,757	679,339	702,319
Retail Trade	1,495,711	1,496,821	1,522,619	1,553,812	1,587,467
Transportation and Warehousing	396,512	397,932	404,582	415,488	433,112
Information	436,865	429,065	425,193	426,056	445,121
Finance and Insurance	528,813	509,852	512,160	522,529	520,579
Real Estate and Rental and Leasing	250,908	248,452	247,476	253,154	260,584
Services	5,947,240	6,063,638	6,216,242	6,519,084	6,809,757
Nonclassifiable Establishments (3)	72,563	44,336	58,663	59,443	36,808
Federal, State and Local Government	2,352,014	2,302,160	2,276,153	2,260,320	2,276,164
Total for all Industries	14,498,327	14,475,411	14,697,321	15,113,718	15,543,166
-					
	2014	2015	2016	2017	2018
- Agriculture, Forestry, Fishing, Hunting	467,923	471,566	474,766	473,554	475,503
Mining	29,142	25,668	21,218	20,130	20,545
Utilities	57,829	57,577	58,008	57,766	56,571
Construction	691,811	748,872	789,841	830,446	880,556
Manufacturing	1,283,779	1,303,651	1,304,915	1,318,709	1,337,213

(1) Source: California Employment Development Department

Wholesale Trade

Finance and Insurance

Total for all Industries

Transportation and Warehousing

Real Estate and Rental and Leasing

Nonclassifiable Establishments (3)

Federal, State and Local Government

Retail Trade

Information

Services

(2) 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.

713,642

455,070

459,781

514,826

265,335

7,056,066

2,317,813

15,992,052

63,478

1,615,557

719,576

488,428

486,838

523,933

271,617

102,851

7,247,138

2,388,336

16,481,383

1,645,332

718,853

1,654,247

517,790

517,275

540,844

278,001

119,680

7,442,898

2,434,565

16,872,901

723,984

553,571

526,390

544,423

285,957

82,201

7,630,490

2,346,343

17,064,414

1,670,450

701,831

592,578

542,792

541,035

296,584

12,948

7,888,061

2,366,731

17,386,502

1,673,554

(3) Note: Businesses are designated as "Nonclassifiable Establishments" when there is sufficient information to determine the appropriate industry classification.

(4) Note: 2019 information is not available and therefore not represented Definitions of Terms and Source Notes: www.labormarketinfo.edd.ca.gov

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

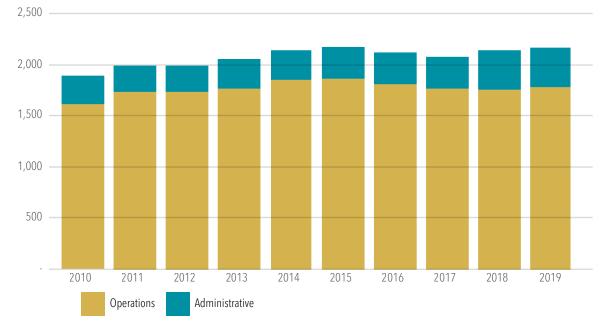
#### Last Ten Fiscal Years

			i un inno	- Lyuivui	Cinto by i	unction	as 01 Ju	10 00,		
Function	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Field Operations	964	862	872	863	920	934	899	904	910	886
Engineering	206	328	329	337	330	324	280	283	286	294
Operations and Maintenance	321	318	295	338	348	355	388	381	390	413
Environmental Services	102	123	128	129	135	132	129	127	126	127
Flood Management	10	62	68	65	65	67	60	10	10	8
Safety of Dams	2	2	2	2	2	2	2	2	-	-
Power Management	-	38	38	35	47	52	53	53	35	48
Operations Total	1,605	1,733	1,732	1,769	1,847	1,866	1,811	1,760	1,757	1,776
Executive	120	43	51	56	63	71	77	78	90	99
Finance and Accounting	74	69	72	72	69	75	69	70	74	72
Technology Services	81	93	79	99	104	105	107	110	110	111
Communications	-	27	26	27	24	27	27	29	26	27
Legal	-	28	31	30	30	31	31	33	33	33
Human Resources	-	-	-	-	-	-	-	-	46	44
Administrative Total	275	260	259	284	290	309	311	320	379	386
Grand Total	1,880	1,993	1,991	2,053	2,137	2,175	2,122	2,080	2,136	2,162

Full-Time Equivalents by Function as of June 30, <sup>1</sup>

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

Source: California Department of Water Resources



#### FULL-TIME EQUIVALENTS

Operating and Capital Indicators (Unau	dicators (Una	udited)								
				Last Ten Years	ears					
	2009	2010	2011	2012	2013	2014	2015	2016 <sup>a</sup>	2017 a	2018 ª
Water										
Water Deliveries (AF)	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	3,160,712
Percentage of Requested Water Delivered	40%	50%	80%	65%	35%	5%	20%	%09	85%	35%
Gross Area Served (Acres)	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	23,513,897
Estimated Population Served <sup>3</sup>	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	27,209,404
Statewide Precipitation (% of Avg) <sup>1</sup>	81%	107%	136%	77%	79%	56%	74%	105%	164%	73%
Statewide Snowpack (% of Apr 1 Avg) <sup>4</sup>	82%	106%	165%	54%	47%	33%	5%	86%	163%	54%
Statewide River Runoff (% of Avg) <sup>1</sup>	67%	93%	146%	62%	%09	35%	46%	67%	217%	68%
Total Storage (% of Average) <sup>2</sup>	79%	103%	130%	97%	79%	57%	54%	82%	120%	%66
Total Storage (% of Capacity) <sup>2</sup>	46%	%09	76%	56%	46%	33%	31%	47%	68%	56%
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	22
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	6,761,700	6,761,700	6,762,567
Number of Pumping Plants	23	23	23	23	23	23	23	23	23	24
Number of Pumps	162	162	162	162	162	162	162	162	162	177
Power										
Energy Generated (Mwh)	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	2,551,901
Energy Purchased (Mwh)	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	3,646,253
Energy Sold (Mwh)	1,530,000	1,814,000	1,192,000	533,000	936,975	33,000	566,891	579,934	243,590	471,188
Net Power Consumption (Mwh)	6,090,000	7,187,000	8,549,000	7,406,000	5,735,699	2,791,083	3,488,458	6,603,883	9,654,529	5,726,966
Number of Power Plants	10	10	10	10	10	6	6	6	6	6
Number of Power Generating Units	37	37	37	37	37	36	36	36	36	36
Note: Unless otherwise noted, amounts are on a calendar year basis.	unts are on a cal	endar year basis	.1							

Source: State Water Project Analysis Office Annual Bulletin 132

Measured in Water Years, which run from October of the prior year to September of the reported year.
 Measured at the end of the Water Year
 Contains duplicate values. Some areas that are in two or more Contractor areas are included in each Contractor's total.
 Based on snow sensor network on April 1
 Amounts for these years are preliminary and subject to change

<u>Legend</u> AF - Acre Feet Mwh - Megawatt Hours

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#### STATISTICAL SECTION

#### Capital Assets, Net (in thousands) (Unaudited)

La	ist Ten Fisca	al Ye	ears			
	2010		2011	2012	2013	2014
Nondepreciable Utility Plant						
Land	\$ 136,1	29	\$ 136,129	\$ 136,129	\$ 136,797	\$ 137,033
Construction work in progress	400,2	229	366,975	408,072	528,836	438,244
Land use rights	10,9	25	11,005	11,250	11,549	11,583
Other intangible assets	81,9	976	81,976	88,930	100,064	103,740
Total Nondepreciable Utility Plant	629,2	259	596,085	644,381	777,246	690,600
Depreciable Utility Plant						
Aqueducts	2,029,8	398	2,057,437	2,064,208	2,071,255	2,167,237
Dams & reservoirs	765,2	246	781,110	781,202	781,408	781,408
Power plants	909,9	04	910,100	906,554	911,703	466,358
Pumping plants	784,2	247	787,008	829,344	836,655	836,814
Environmental preservation and mitigation	67,7	'97	67,797	67,797	67,797	67,797
Fish protection	33,9	934	33,934	33,934	33,934	33,934
Facilities		-	64,810	65,820	66,230	246,397
Equipment	65,5	680	67,996	70,593	71,819	75,705
Computer software	23,6	529	23,629	24,162	24,501	24,529
Land use rights		-	-	272	272	272
Other intangible assets		-	-	-	11,995	11,995
General		-	5,964	6,491	39,579	61,310
Total Depreciable Utility Plant	4,680,2	235	4,799,785	4,850,377	4,917,148	4,773,756
Less Accumulated Depreciation/Amortization	(2,094,3	06)	(2,194,406)	(2,281,806)	(2,366,429)	(1,994,695)
Total Utility Plant, Net	\$ 3,215,1	88	\$ 3,201,464	\$ 3,212,952	\$ 3,327,965	\$ 3,469,661

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# Capital Assets, Net (in thousands) (Unaudited)

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	2015	2016	2017 (As restated)	2018 (As restated)	2019
Nondepreciable Utility Plant					
Land	\$ 141,874	\$ 147,681	\$ 156,934	\$ 162,457	\$ 188,965
Construction work in progress	611,900	769,871	1,340,586	1,653,005	2,078,333
Land use rights	11,630	11,760	11,767	12,458	12,460
Other intangible assets	103,445	100,123	99,240	98,981	99,440
Total Nondepreciable Utility Plant	868,849	1,029,435	1,608,527	1,926,901	2,379,198
Depreciable Utility Plant					
Aqueducts	2,169,352	2,171,981	2,126,713	2,183,839	2,182,663
Dams & reservoirs	708,303	708,303	729,521	817,041	818,899
Power plants	441,202	470,818	477,044	523,529	650,730
Pumping plants	826,704	838,880	850,475	1,018,627	1,025,608
Environmental preservation and mitigation	67,797	67,797	67,797	67,797	67,797
Fish protection	33,934	35,544	35,544	35,544	35,544
Facilities	254,741	271,965	298,295	301,157	304,796
Equipment	77,384	79,229	82,526	75,214	82,698
Computer software	24,531	24,717	27,108	27,206	27,349
Land use rights	272	272	272	272	272
Other intangible assets	12,005	12,005	12,005	12,005	12,005
General	62,262	73,053	119,562	162,619	209,913
Total Depreciable Utility Plant	4,678,487	4,754,564	4,826,862	5,224,850	5,418,274
Less Accumulated Depreciation/Amortization	(2,014,654)	(2,084,676)	(2,117,138)	(2,185,494)	(2,276,510)
Total Utility Plant, Net	\$ 3,532,682	\$ 3,699,323	\$ 4,318,251	\$ 4,966,257	\$ 5,520,962

Last Ten Fiscal Years

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#### **APPENDIX B**

#### **OPINION OF NOTE COUNSEL**

May 1, 2020

State of California Department of Water Resources Sacramento, California

State of California Department of Water Resources Water Revenue Commercial Paper Notes Series 1

(Final Opinion)

We have acted as note counsel to the State of California Department of Water Resources (the "Department") in connection with authorization of issuance of up to \$600,000,000 aggregate principal amount (at any time Outstanding) of commercial paper notes by the Department pursuant to and by authority of Part 3 of Division 6 of the Water Code of the State of California, and under a resolution of the Department, adopted as of March 1, 1993, as supplemented to the date hereof (the "Resolution"), and designated State of California Department of Water Resources Water Revenue Commercial Paper Notes, Series 1 (the "Notes of Series 1"). Capitalized terms not otherwise defined herein shall have the meanings ascribed thereto in the Resolution.

In such connection, we have reviewed the Resolution, the Issuing and Paying Agent Agreement, the Tax Certificate of the Department dated the date hereof (the "Tax Certificate"), an opinion of counsel to the Department, certifications of the Department and the Issuing and Paying Agent and others as to certain factual matters and such other documents and matters to the extent we deemed necessary to render the opinions set forth herein.

The opinions expressed herein are based on an analysis of existing laws, regulations, rulings and court decisions, and cover certain matters not directly addressed by such authorities. Such opinions may be affected by actions taken or omitted or events occurring after the date hereof and before or after Notes of Series 1 are issued. We have not undertaken to determine, or to inform any person, whether any such actions are taken or omitted or events do occur or any other matters come to our attention after the date hereof. Accordingly, this letter speaks only as of its date and is not intended to and may not, be relied upon or otherwise used in connection with any such actions, events or matters. We disclaim any obligation to update this letter. We have assumed the genuineness of all documents and signatures presented to us (whether as originals or as copies and the due and legal execution and delivery thereof by, and validity against, any parties other than the Department). We have assumed, without undertaking to verify, the accuracy (as of the date hereof and as of each date of issuance from time to time of the Notes of Series 1) of the factual matters represented, warranted or certified in the documents, and of the legal conclusions contained in the opinion, referred to in the second paragraph hereof. Furthermore, we have assumed compliance with all covenants and agreements contained in the Resolution, the Issuing and Paying Agent Agreement and the Tax Certificate, including (without limitation) covenants and agreements compliance with which is necessary to assure that future actions, omissions or events will not cause interest on the Notes of Series 1 to be included in gross income for federal income tax purposes, possibly retroactive to the date on which the first Notes of Series 1 were issued. We call attention to the fact that the rights and obligations under the Notes of Series 1, the Resolution, the Issuing and Paying Agent Agreement and the Tax Certificate and their enforceability may be subject to bankruptcy, insolvency, receivership,

reorganization, arrangement, fraudulent conveyance, moratorium and other laws relating to or affecting creditors' rights, to the application of equitable principles, to the exercise of judicial discretion in appropriate cases and to the limitations on legal remedies against the State of California. We express no opinion with respect to any indemnification, contribution, liquidated damages, penalty (including any remedy deemed to constitute or having the effect of a penalty), right of set-off, arbitration, judicial reference, choice of law, choice of forum, choice of venue, non-exclusivity of remedies, waiver or severability provisions contained in the foregoing documents. Our services did not include financial or other non-legal advice. Finally, we undertake no responsibility for the accuracy, completeness or fairness of the Offering Memorandum or other offering material relating to the Notes of Series 1 and express no view or opinion with respect thereto.

Based on and subject to the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The Resolution has been duly adopted by the Department and constitutes a valid and binding obligation of the Department in accordance with the terms of the Resolution.

2. The Notes of Series 1, when duly issued from time to time in the form authorized by and otherwise in compliance with the Resolution, executed by a duly authorized official of the Department and authenticated by the Issuing and Paying Agent, in all respects in accordance with the Resolution and the Issuing and Paying Agent Agreement against payment therefor, will constitute the valid and binding limited obligations of the Department, payable only out of the Revenues (as that term is defined in the Resolution) and moneys and securities held, and accounts established, under the Resolution.

3. The Notes of Series 1, when issued in the form authorized by the Resolution and authenticated by the Issuing and Paying Agent, in all respects in accordance with the Resolution and the Issuing and Paying Agent Agreement, will be secured by a first and direct charge and lien upon the Revenues and all moneys and securities held, and accounts established, under the Resolution (except amounts held in any Rebate Fund established under the Resolution), subject only to the provisions of the Resolution permitting the payment or use of such Revenues, moneys, securities and accounts for the purposes, in the manner and upon the terms and conditions set forth in the Resolution. The Notes of Series 1 are not secured by any other property or moneys of the Department.

4. Neither the principal of nor the interest on the Notes of Series 1 constitutes a debt, liability or obligation of the State of California or, except as expressly provided in the Resolution, of the Department.

5. Interest on the Notes of Series 1, when the Notes of Series 1 are issued from time to time in accordance with the Resolution, the Issuing and Paying Agent Agreement and the Tax Certificate, will be excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986 and exempt from State of California personal income taxes. The amount treated as interest on the Notes of Series 1 and excluded from gross income will depend upon the taxpayer's election under Internal Revenue Service Notice 94-84. Interest on the Notes of Series 1 when issued from time to time in accordance with the Resolution, the Issuing and Paying Agent Agreement and the Tax Certificate, will not constitute a specific preference item for purposes of the federal alternative minimum tax. We express no opinion regarding other tax consequences related to the ownership or disposition of, or the amount, accrual or receipt of interest on, the Notes of Series 1.

Very truly yours,

#### ORRICK, HERRINGTON & SUTCLIFFE LLP

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